Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)
Business Data Services in an Internet Protocol Environment) WC Docket No. 16-143
Technology Transitions) GN Docket No. 13-5
Special Access for Price Cap Local Exchange Carriers) WC Docket No. 05-25
AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services) RM-10593)
Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. §160(c) to Accelerate Investment in Broadband and Next-Generation Networks) WC Docket No. 18-141)

REPORT AND ORDER ON REMAND AND MEMORANDUM OPINION AND ORDER

Adopted: July 10, 2019 Released: July 12, 2019

By the Commission: Chairman Pai and Commissioner O'Rielly issuing separate statements; Commissioner Rosenworcel concurring; Commissioner Starks concurring and issuing a statement.

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I. INTRODUCTION

- 1. Transporting information from one place to another within or across telecommunications networks is of fundamental importance to consumers, businesses, non-profit organizations, and government institutions in our increasingly digital world. As a result, the demand for transport services and facilities over which voice, video, and other bandwidth intensive applications and services ride has grown at an extraordinary pace over the last few decades. While it used to be that only incumbent local exchange carriers (LECs) provided transport services and facilities to business and consumer premises, that is no longer the case. The growth in demand for transport (a subset of business data services (BDS)) has fueled a dynamic and competitive array of transport providers. Incumbent LECs, competitive LECs, fiber providers, and cable companies are among the myriad providers that now provide transport options throughout our country. Sometimes they build their own facilities, sometimes they purchase transport services or facilities from each other, but individually and collectively they offer competitive transport options in almost all areas served by price cap carriers.
- 2. Despite this array of transport options, price cap incumbent LECs' lower-speed legacy transport offerings—their Time Division Multiplexing (TDM) transport services offered to enterprise and wholesale customers—remained subject to ex ante pricing regulation until two years ago.¹ And even now, price cap LECs remain subject to decades-old network unbundling obligations that require them to provide their competitors with dedicated transport facilities between wire centers within their local networks as unbundled network elements (UNEs) at regulated rates under Commission rules last modified almost fifteen years ago.² UNE transport includes DS1- and DS3-capacity facilities that are functionally equivalent to lower-speed BDS TDM transport services.³ Incumbent LECs provide their commercially available BDS transport services over the same local network that they use to provide UNE DS1 and DS3 transport to competitive LECs that do not have their own transport network facilities.
- 3. In the *BDS Order*, the Commission adopted a framework for BDS that applies ex ante pricing regulation only where competition is expected to materially fail to ensure just and reasonable rates.⁴ Within that context, the Commission found that competition for TDM transport services was sufficiently pervasive at the local level in areas served by price cap LECs to justify relief from pricing regulation nationwide.⁵ On appeal, the Eighth Circuit Court of Appeals, although not reaching the Commission's substantive conclusions about the competitiveness of TDM transport, held that the Commission had not provided adequate notice on the issue of ending ex ante pricing regulation of TDM transport services and remanded the issue to the Commission.
- 4. Today, we take the next steps in eliminating the unnecessary costs and harmful market distortions that arise from imposing pricing and other regulation where competition can be reasonably expected to ensure just and reasonable rates. Having sought comment in a *Second Further Notice* on elimination of ex ante pricing regulation of BDS TDM transport⁶ services offered by price cap LECs, we

¹ See Business Data Services in an Internet Protocol Environment et al., Report and Order, 32 FCC Rcd 3459 (2017) (BDS Order), remanded in part sub nom., Citizens Telecomms. Co. of Minn., LLC v. FCC, 901 F.3d 991 (2018) (Citizens Telecomms. v. FCC), mandate stayed (Order, 8th Cir. Nov. 9, 2018) (Nos. 17-2296 et al.) (Stay Order) (mandate stayed until Nov. 12, 2019).

² See Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Order on Remand, 20 FCC Rcd 2533 (2005) (Triennial Review Remand Order), aff'd, Covad Commc'ns Co. v. FCC, 450 F.3d 528 (D.C. Cir. 2006); 47 CFR §§ 51.307-21.

³ See 47 CFR § 51.319(d)(2)(ii)-(iii).

⁴ See BDS Order, 32 FCC Rcd at 3499, para. 86.

⁵ *Id.* at 3499, para. 85.

⁶ As used in this item, the term "TDM transport" means lower speed BDS transport services at bandwidths equal to or less than a DS3 circuit. The Commission previously addressed the regulation of higher speed BDS TDM (continued....)

find that there is an even more robust record that supports elimination of ex ante pricing regulation of these lower-speed BDS transport services. Similarly, we also exercise our section 10 forbearance authority to partially grant price cap incumbent LECs⁷ forbearance relief from UNE DS1/DS3 Transport⁸ requirements. Specifically, we grant price cap incumbent LECs forbearance from UNE DS1/DS3 Transport obligations between certain wire centers where, based on our analysis of competitive network deployment, we find that such obligations are no longer necessary to further the local market opening provisions of the Act. By eliminating ex ante pricing regulation of BDS TDM transport services and partially forbearing from enforcing UNE DS1/DS3 Transport obligations in areas served by price cap LECs, we remove unnecessary regulatory burdens that stifle investment and growth in advanced communications networks and ultimately inhibit the transition to IP-enabled and other next generation services. We also enhance competition by encouraging more facilities-based competition and network deployment.

II. BACKGROUND

A. BDS TDM Transport Services

5. The term business data services refers to the "dedicated point-to-point transmission of data at guaranteed speeds and service levels." BDS offerings are fundamentally important to modern communities and economies. Over the last several decades, the Commission has repeatedly recognized the increasing competition for BDS services in areas of the country served by price cap LECs. Competition has grown even more markedly in recent years as cable operators increasingly compete for all aspects of BDS, including TDM transport. In response, the Commission has worked consistently to streamline regulation of such services to reflect this evolution.

⁷ The terms "price cap LECs" and "price cap incumbent LECs" refer to incumbent local exchange carriers, as defined in section 251(h) of the Communications Act of 1934, as amended (the Act), 47 U.S.C. § 251(h), that are subject to price cap regulation pursuant to our rules. *See* 47 CFR § 61.41.

⁸ We use the term "UNE DS1/DS3 Transport" or "UNE Transport" to refer to the dedicated DS1 and DS3 capacity transport facilities subject to unbundling obligations pursuant to section 251(c)(3) of the Act, either collectively or individually, as appropriate herein. 47 U.S.C. § 251(c)(5). The Commission's transport unbundling rules also include limited obligations to unbundle interoffice dark fiber that we do not address in this item.

⁹ USTelecom filed a petition for forbearance from unbundling obligations, among other things, on May 4, 2018. Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141 (filed May 4, 2018) (USTelecom Forbearance Petition); Wireline Competition Bureau to Incorporate Business Data Services Data and Second Further Notice and Further Notice Record into USTelecom Forbearance Proceeding, WC Docket Nos. 18-141, 17-144, 16-143, 05-25, RM-10593, Public Notice, DA 19-249 (WCB Apr. 3, 2019) (April 3, 2019 Public Notice). At this time, we act solely with respect to USTelecom's request for relief from UNE DS1/DS3 Transport obligations. USTelecom's requested relief from other obligations remains pending with the statutory deadline for Commission action of August 2, 2019. See Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141, Order, DA 19-75 (WCB Feb. 14, 2019).

¹⁰ See BDS Order, 32 FCC Rcd at 3463, para. 6; see also 47 CFR § 69.801(a). The Commission previously referred to business data services as special access services. See Business Data Services in an Internet Protocol Environment et al., WC Docket Nos. 16-143 et al., Tariff Investigation Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 4723, 4725, para. 1 & n.1 (2016) (Further Notice).

¹¹ Given that cable operators almost universally bypass incumbent LEC network infrastructure, they compete for both the end user channel termination portion of the service as well as the transport portion. Competition from what (continued....)

- 6. In so doing, the Commission has characterized TDM transport services, which "involve carrying traffic from one point of traffic concentration to another," as "low hanging fruit" for competitors because they can more easily justify competitive investment and deployment.¹³ In 1999, recognizing that burdensome pricing regulation is unnecessary and counter-productive where competitive pressure exists, the Commission granted pricing flexibility to price cap carriers for their BDS offerings, including their TDM transport services.¹⁴ The Commission provided two levels of pricing flexibility to price cap LECs offering BDS, including TDM-based transport services, keyed to the presence of competitive providers collocated at a price cap LEC's wire centers.¹⁵ The Commission suspended further grants of pricing flexibility in 2012, pending the resolution of the BDS proceedings.¹⁶
- 7. In 2017, after more than ten years of study and a massive data collection (the 2015 *Collection*), 17 the Commission adopted an order comprehensively addressing the pricing regulation of

(Continued from previous page) ————
we have termed "best efforts" service by cable is particularly relevant to our analysis of the lower speed TDM
transport services at issue here. See BDS Order, 32 FCC Rcd at 3474-75, paras. 30-31.

¹⁷ The 2015 Collection is comprised of the data that the Commission collected from BDS providers and purchasers and certain "best efforts" providers in price cap areas for purposes of the price cap BDS proceeding. See Further Notice, 31 FCC Rcd at 4737-43, paras. 29-37, 39-43. We note that the data parties submitted in response to the 2015 Collection are 2013 data and are therefore necessarily historical in nature. We have not attempted to modify the data to reflect trends or events subsequent to their submission. While data and trends in the industry have evolved since the submission of these data, we find the 2015 Collection data nonetheless continue to be relevant to our analysis and continue to represent the best data available in assessing the supply of BDS. INCOMPAS observes that the data predate mergers between Verizon and XO Communications and between CenturyLink and Level 3 and requests that we "exclude[] fiber now owned by an incumbent LEC's CLEC affiliate within the incumbent LEC's region." Letter from John T. Nakahata, Counsel to INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 18-141 et al., at 1 (filed June 28, 2019) (INCOMPAS June 28, 2019 Ex Parte Letter). In the Commission's review of the Verizon-XO transaction, the Bureau "determined that more than 99 percent of the [] buildings that have overlapping fiber facilities with Verizon within its incumbent LEC region have either (1) one or more alternative competitive fiber providers already in the building, or (2) one or more alternative competitive fiber providers within 0.1 miles of the building" Applications of XO Holdings and Verizon Communications Inc. for Consent to Transfer Control of XO Communications, LLC, Memorandum Opinion and Order, WC Docket No. 16-70, 31 FCC Rcd 12501, 12510-12, para. 20 (WCB 2017); see also Letter from Patrick R. Halley, Senior Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 18-141, at 1 (USTelecom July 3, 2019 Ex Parte Letter). Similarly, in its review of the merger between CenturyLink and Level 3, the Commission determined that following divestiture of overlapping fiber facilities in three markets, there were competitive fiber facilities unrelated to Level 3 within a half mile of over 99% of locations with BDS demand within CenturyLink's incumbent LEC operating areas. See Applications of Level 3 Communications, Inc. and CenturyLink, (continued....)

¹² See generally Access Charge Reform et al., Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221 (1999) (Pricing Flexibility Order), aff'd, WorldCom v. FCC, 238 F.3d 449 (D.C. Cir. 2001); BDS Order; Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers; Business Data Services in an Internet Protocol Environment; Special Access for Price Cap Local Exchange Carriers, Report and Order, Second Further Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 33 FCC Rcd 10403 (2018) (Second Further Notice).

¹³ BDS Order, 32 FCC Rcd at 3498, para. 82.

¹⁴ Pricing Flexibility Order, 14 FCC Rcd at 14233, para. 19 ("As the market becomes more competitive, [regulatory] constraints become counter-productive.").

¹⁵ See generally Pricing Flexibility Order; see also 47 CFR § 69.709 (specifying competitive showings necessary to obtain Phase I and Phase II relief for transport services).

¹⁶ See Special Access for Price Cap Local Exchange Carriers; AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, WC Docket No. 05-25, RM-10593, Report and Order, 27 FCC Rcd 10557 (2012); see also BDS Order, 32 FCC Rcd at 3510-11, para. 114.

BDS in price cap LEC areas. In the *BDS Order*, the Commission found, among other things, that competition for BDS TDM transport services was sufficiently pervasive to justify elimination of "all ex ante pricing regulation of price cap incumbent LEC provision of TDM transport and other transport (i.e., non-end user channel termination)" services.¹⁸ In support of this conclusion, the Commission looked to the record evidence showing that "competitive providers have deployed competing transport networks in more than 95% of census blocks with [BDS] demand," which included "about 99% of business establishments." It also found that "in all price cap territories, 92.1 percent of buildings served were within a half mile of competitive fiber transport facilities" and that, "for all census blocks with business data services demand, 89.6 percent have at least one served building within a half mile of competitive LEC fiber." This half mile is significant because, as the Commission concluded, most BDS providers are willing and able to profitably invest in and deploy facilities within a half mile of existing competitive facilities. In addition, the Commission found that buildings with BDS demand that were served only by an incumbent LEC were on average only 364 feet from the closest competitive LEC fiber facility.

8. After the Eighth Circuit's partial remand of the *BDS Order*, finding that the Commission had not provided sufficient notice on the issue of eliminating ex ante pricing regulation for TDM transport, the Commission released the *Second Further Notice*, proposing to eliminate ex ante pricing regulation of price cap LECs' BDS TDM transport and other transport (i.e., non-end user channel termination) services.²³ The Commission received eight comments, six reply comments, and several filings memorializing various ex parte communications. Also, in the interest of ensuring a more complete analysis of competitive conditions affecting TDM transport services, the Commission conducted additional analysis of TDM transport services using data from the *2015 Collection*. That analysis is focused on measuring the proximity of incumbent LEC wire centers to competitive fiber and shows that the vast majority of locations with BDS demand in price cap areas are served by wire centers that are no more than a half mile from competitive fiber. The Wireline Competition Bureau (Bureau) made that additional analysis available for public review and sought and received an additional seven comments and six reply comments about those data tables (the *April Data Tables*).²⁴ As a result of these two additional rounds of comments, we now have an even more robust record.

¹⁸ BDS Order, 32 FCC Rcd at 3495-3501, paras. 77-82, 85, 90-93.

¹⁹ *Id.* at 3496, para. 79 (citing Letter from James P. Young, Counsel for AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-143 et al. (filed Oct. 25, 2016) (AT&T Oct. 25, 2016 *Ex Parte* Letter)).

²⁰ *Id.* at 3501, para. 91.

²¹ *Id.* at 3479-82, paras. 40-45.

²² *Id.* at 3481, para. 42 ("About half of these buildings were within 88 feet of competitive fiber facilities and 75 percent were within 456 feet.").

²³ See generally Second Further Notice, 33 FCC Rcd at 10453-58, paras. 147-62.

²⁴ Wireline Competition Bureau Seeks Focused Additional Comments in Business Data Services and USTelecom Forbearance Petition Proceedings and Reopens Secure Data Enclave, WC Docket Nos. 18-141, 17-144, 16-143, 05-25, RM-15093, Public Notice, DA 19-281 (WCB Apr. 15, 2019) (April 15, 2019 Public Notice). The Bureau subsequently extended the deadline for reply comments in response to concerns expressed by some parties regarding the amount of time they had to evaluate the Commission's additional calculations. See INCOMPAS, Motion for Extension of Time, WC Docket Nos. 18-141, 17-144, 16-143, 05-25 (filed May 13, 2019); Wireline Competition Bureau Extends Reply Comment Deadline and Access to Secure Data Enclave in Business Data Services and

B. The Commission's UNE DS1/DS3 Transport Rules and USTelecom's Forbearance Petition

- 9. Prior to the Telecommunications Act of 1996 (the 1996 Act), incumbent LECs held a monopoly on local telecommunications service.²⁵ Through local market-opening provisions designed to facilitate competition, the 1996 Act required incumbent LECs to unbundle and open their networks to competitors at cost-based rates for the provision of telecommunications services.²⁶ The Commission observed that these provisions are "not to ensure that entry shall take place irrespective of costs, but to remove both the statutory and regulatory barriers and economic impediments that inefficiently retard entry, and to allow entry to take place where it can occur efficiently."²⁷ These unbundling obligations, embodied in section 251(c)(3) of the Act, resulted in a list of UNEs that competitive LECs can lease from incumbent LECs, sometimes in combination, to incorporate into their own competitive service offerings.²⁸ Dedicated interoffice transport facilities—segments of the very same network facilities that incumbent LECs use to provide their own BDS services, including TDM transport—are one type of UNE that incumbent LECs must make available to competitors under the Act and the Commission's rules.²⁹ UNE DS1/DS3 transport from incumbent LEC wire centers within a local exchange service area are dedicated connections between such wire centers that operate at a total digital signal speed of 1.544 Mbps and 44.736 Mbps, respectively³⁰
- 10. UNE DS1/DS3 Transport is not available between every pair of incumbent LEC wire centers within a local exchange area. In the *Triennial Review Remand Order*, the Commission modified its then-existing UNE Transport rules and established new rules that limited the availability of UNE DS1/DS3 Transport to wire center routes on which one or both wire center endpoints meet certain criteria indicative of actual or potential competition. These criteria use a three-tiered system in which Tier 1 represents the most actual or potential competition and Tier 3 the least.³¹ For routes on which both endpoints are considered to have actual or potential competition, based on either the number of fiber-

²⁵ See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 et al., First Report and Order, 11 FCC Rcd 15499, 15505, para. 1 (1996) (subsequent history omitted) (First Local Competition Order).

²⁶ See 47 U.S.C. §§ 251(c)(3), 252(d)(1).

²⁷ Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Notice of Proposed Rulemaking, 11 FCC Rcd 14171, 14177, para. 12 (1996).

²⁸ Over the 23 years since the passage of the 1996 Act, the Commission has expanded and contracted its list of UNEs, as well as combinations of UNEs, that incumbent LECs must make available to competitors, largely in response to court remands requiring different approaches to implementing the section 251(d)(2)(B) obligation that the Commission consider whether lack of access to the UNE would "impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." 47 U.S.C. § 251(d)(2); see, e.g., First Local Competition Order, 11 FCC Rcd at 15616-775, paras. 226-541; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696 (1999) (UNE Remand Order); Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers et al., Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003) (Triennial Review Order) (subsequent history omitted); see generally Triennial Review Remand Order.

²⁹ 47 CFR § 51.319(d).

³⁰ *Id.* § 51.319(d)(ii)-(iii).

³¹ Triennial Review Remand Order, 20 FCC Rcd at 2597-98, para. 111. We refer generally herein to the different UNE Transport obligations contained in our current rules dependent upon the tier classifications of the incumbent LEC wire centers at each end point of a transport route as the "current limitations on UNE Transport."

based collocators or the number of business lines served by the wire center, ³² an incumbent LEC need not make UNE DS1/DS3 Transport available. Incumbent LECs determine which wire centers fall within each tier, although these classifications are subject to adjudication by state regulatory commissions in the event of a dispute with competitive LECs.³³ UNE DS1 Transport is only available if at least one wire center endpoint is Tier 2 or Tier 3 while, for UNE DS3 Transport to be available, at least one wire center endpoint must be Tier 3.³⁴ This tiered basis for determining the availability of UNE Transport was intended to tailor the UNE Transport requirements "narrowly to apply only where deployment of these facilities is not economic."³⁵

- 11. *USTelecom Forbearance Petition*. On May 4, 2018, while the Eighth Circuit appeal of the *BDS Order* was still pending, USTelecom filed a petition seeking "nationwide forbearance from outmoded regulatory mandates that distort competition and investment decisions." Among the requirements from which USTelecom seeks forbearance are the incumbent LEC-specific unbundling mandates in sections 251(c)(3) of the Act, including UNE DS1/DS3 Transport, and associated section 251 and 252 obligations. USTelecom argues that incumbent LECs face significant intermodal competition for their local telecommunications services, and that the availability of UNEs in such an environment actually distorts competition by favoring competitors that are not investing in their own facilities over those that are (including incumbent LECs). Particularly relevant here, USTelecom argues that because the *BDS Order* found that nationwide transport service competition is robust, UNE Transport obligations also should be eliminated.
- 12. Several parties oppose USTelecom's Petition with respect to UNE forbearance based on claims that USTelecom has not demonstrated that competition is as geographically widespread and significant as USTelecom alleges and thus does not support nationwide relief.⁴⁰

³² "Fiber-based" collocators are described as competitive fiber or fixed wireless providers that connect to the incumbent LECs' network through a facilities arrangement in an incumbent LEC's wire center and connects to facilities located in a different wire center. *Triennial Review Remand Order*, 20 FCC Rcd at 2593-94, para. 102. The Commission found that the number of business lines in a wire center reflect the likelihood of the wire center attracting and supporting competitive transport facilities. *Triennial Review Remand Order*, 20 FCC Rcd at 2494-95, paras. 103-04. For purposes of UNE Transport, a Tier 1 wire center has at least four fiber-based collocators or at least 38,000 business lines, or both. A Tier 2 wire center is one that does not qualify as Tier 1 but has at least three fiber-based collocators or at least 24,000 business lines, or both. All other wire centers are Tier 3. 47 CFR § 51.319(d)(3).

³³ See Triennial Review Remand Order, 20 FCC Rcd at 2665-66, para. 234 & n.660. Wire centers that have been classified as Tier 1 or Tier 2 are not subject to later reclassification as Tier 2 or Tier 3 (in the case of a Tier 1 wire center) or as Tier 3 (in the case of a Tier 2 wire center, although such a wire center can later be classified as Tier 1). See 47 CFR § 51.319(d)(2)(i)-(ii).

^{34 47} CFR § 51.319(d)(2)(ii)-(iii).

³⁵ Triennial Review Remand Order, 20 FCC Rcd at 2575, para. 66.

³⁶ Petition at 1. USTelecom states that forbearance "[r]elief is sought for all [BOCs] or all ILECs, depending on the class to which the specific obligation at issue applies." *Id.* at 2 n.3. The specific regulations and the associated relief that USTelecom seeks, as well as a list of pending proceedings in which USTelecom has taken a position regarding relief that is identical to, or comparable to, the relief sought in this Petition, are detailed in Appendix A to the Petition. This requested relief includes relief from UNE DS1/DS3 Transport obligations. *Id.*

³⁷ Petition at 2 and Appx. A.

³⁸ Petition at 25; USTelecom Sept. 5, 2018 Reply at 30.

³⁹ See, e.g., Petition at 13.

⁴⁰ See, e.g., Opposition of INCOMPAS et al., WC Docket No. 18-141, at 38-42, 52-55, 57-64 (filed Aug. 6, 2018) (INCOMPAS et al. Aug. 6, 2018 Opposition); Opposition of Granite, WC Docket No. 18-141, at 3, 13 (filed Aug. 6, 2018) (Granite Aug. 6, 2018 Opposition); Opposition of Wholesale Voice Line Coalition, WC Docket No. 18-141, (continued....)

13. On April 3, 2019, the Bureau announced its intent to incorporate confidential and highly confidential information in the 2015 Collection, as well as the public comments filed in the Second Further Notice and Further Notice in the BDS proceedings, into the record of the USTelecom Forbearance Petition proceeding.⁴¹ The Bureau subsequently supplemented that record with the April Data Tables and related information prepared by the Commission's Office of Economics and Analytics,⁴² just as it had done in the BDS proceeding.⁴³ Because the April Data Tables focus on measuring the proximity of price cap LEC wire centers to competitive fiber,⁴⁴ the Bureau sought comment on the extent to which the April Data Tables provided relevant information for evaluating forbearance relief from UNE DS1/DS3 Transport obligations in price cap LEC areas.⁴⁵ Price cap LEC wire centers are the precise locations from which UNE Transport obligations arise; thus, the proximity of competitive fiber to these wire centers has a direct bearing on whether UNE Transport obligations remain necessary at such wire centers and whether forbearance is warranted. The Bureau received an additional nine comments and 12 reply comments related to the April Data Tables in the record of the USTelecom Forbearance Petition proceeding.

C. Forbearance Under Section 10 of the Act

14. Section 10 of the Communications Act of 1934 as amended by the Telecommunications Act of 1996 (the Act) requires the Commission to forbear from applying any requirement of the Act or of our regulations to a telecommunications carrier or telecommunications service if and only if the Commission determines that: (1) enforcement of the requirement "is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;" (2) enforcement of that requirement "is not necessary for the protection of consumers;" and (3) "forbearance from applying that requirement is consistent with the public interest." Forbearance is warranted only if all three criteria are satisfied.⁴⁷

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at 10-13 (filed Aug. 6, 2018) (Wholesale Voice Line Coalition Aug. 6, 2018 Opposition); Opposition of Public Knowledge et al., WC Docket No. 18-141, at 5-10 (filed Aug. 6, 2018) (Public Knowledge et al. Aug. 6, 2018 Opposition); Opposition of MetTel, WC Docket No. 18-141, at 1-3 (filed Aug. 6, 2018) (MetTel Aug. 6, 2018 Opposition); California Public Utilities Commission Comments at 7-10 (rec. Aug. 6, 2018) (CPUC Aug. 6, 2018 Comments); ICG Coalition Comments at 2-3 (ICG CLEC Coalition Aug. 6, 2018 Comments); Opposition of First Communications, LLC, WC Docket No. 18-141, at 9-13 (filed Aug. 6, 2018) (First Communications Aug. 6, 2018 Comments); Public Knowledge et al. Sept. 5, 2018 Reply at 2-3 & n.6; CALTEL Sept. 5, 2018 Reply at 27; INCOMPAS et al. Sept. 5, 2018 Reply at 10.

⁴⁶ 47 U.S.C. § 160(a). In making the public interest determination, the Commission must also consider, pursuant to section 10(b) of the Act, "whether forbearance from enforcing the provision or regulation will promote competitive (continued....)

⁴¹ See April 3, 2019 Public Notice.

⁴² Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. §160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141, Data Collection Protective Order, DA 19-294, at 3, para. 4 (WCB Apr. 16, 2019).

⁴³ See April 15, 2019 Public Notice.

⁴⁴ The *April Data Tables* also include an indicator for whether the wire center code provided by the incumbent LEC matches a wire center code in the Local Exchange Routing Guide database (LERG), which we consider to be a necessary check to ensure that wire centers were designated correctly.

⁴⁵ April 15, 2019 Public Notice at 2; see Second Further Notice, 33 FCC Rcd at 10453-57, paras. 148-56; see also INCOMPAS Comments at 8 (filed Feb. 8, 2019) (asserting that "distances between the fiber and ILEC end offices" is the relevant measure of competition) (INCOMPAS Feb. 8, 2019 Comments). At the same time, the Bureau sought comment in the USTelecom Forbearance Petition proceeding on the public filings submitted in response to the Second Further Notice and Further Notice in the BDS proceeding that it had incorporated into the record on April 3, 2018. April 15, 2019 Public Notice at 3.

III. ELIMINATING EX ANTE PRICING REGULATION OF BDS TDM TRANSPORT SERVICES OFFERED BY PRICE CAP LECS (REPORT AND ORDER ON REMAND)

15. After careful review of the record, we reaffirm the Commission's previous decision to eliminate ex ante pricing regulation of TDM transport services in areas served by price cap LECs. The current record, even more so than the record that was before the Commission in 2017, demonstrates that widespread and ever-increasing competition in the supply of BDS transport makes ex ante pricing regulation of TDM transport in price cap areas both unnecessary and unduly burdensome. We therefore grant nationwide relief from ex ante pricing regulation of BDS TDM transport services in price cap areas, forbear from applying Section 203 tariffing requirements to these services, and adopt permissive detariffing for price cap LECs' BDS TDM transport services for a transition period, followed by mandatory detariffing of these services.⁴⁸

A. Competition for BDS TDM Transport

16. In finding that there is widespread and increasing competition for BDS TDM transport services in price cap areas, we rely in part on the evidence and analysis that was before the Commission in 2017 and also on evidence and analysis added to the record through two additional rounds of public comment following the Eighth Circuit Court's remand. Indeed, the additional submissions to the record have substantiated the reasonableness of the Commission's previous findings, and nothing in those submissions would cause us to modify the conclusions the Commission previously made concerning the state of competition for TDM transport services. As the Commission did in 2017, we find particularly persuasive the data that shows that as of 2013: (1) "competitive providers ha[d] deployed competing transport networks in more than 95% of census blocks with [BDS] demand" which included "about 99% of business establishments;" (2) "in all price cap territories, 92.1 percent of buildings served were within a half mile of competitive fiber transport facilities" and that, "for all census blocks with business data services demand, 89.6 percent have at least one served building within a half mile of competitive LEC fiber;" and (3) buildings with BDS demand that were served only by an incumbent LEC were on average only 364 feet from the closest competitive LEC fiber facility. ⁵¹

⁴⁷ CTIA v. FCC, 330 F.3d 502, 509 (D.C. Cir. 2003) (explaining that the three prongs of section 10(a) are conjunctive and that the Commission could properly deny a petition for failure to meet any one prong).

⁴⁸ This Order does not address the regulation of lower speed BDS TDM transport services offered by rate-of-return carriers that receive model-based or other forms of fixed high-cost universal service support. The Commission sought comment on providing a path to eliminating ex ante pricing regulation of lower capacity TDM transport services in the *Second Further Notice* in WC Docket No. 17-144. *See Second Further Notice*, 33 FCC Red at 10457-58, paras. 157-62.

⁴⁹ BDS Order, 32 FCC Rcd at 3496, para. 79 (citing AT&T Oct. 25, 2016 Ex Parte Letter).

⁵⁰ *Id.* at 3501, para. 91; *see also* AT&T Mar. 11, 2019 Reply at 5 n.11 ("The portion of *demand*, measured in bandwidth, that is within a half mile of competitive facilities is even higher than 92 percent."). INCOMPAS argues (continued....)

- 17. We continue to find that competitive suppliers with nearby fiber put competitive pressure on transport prices. As the Commission previously found, the record demonstrates that providers actively compete for customers located within about a half mile from their networks.⁵² That is because wireline providers of BDS are commonly willing to extend their existing networks a half mile or further to meet demand.⁵³ Thus, the fact that 92.1% of buildings served with business data services in price cap areas were within a half mile of competitive fiber transport facilities and that, 89.6% of census blocks with BDS demand in price cap areas had at least one served building within a half mile of competitive LEC fiber, demonstrates the widespread competitive pressure on TDM transport in price cap areas.
- 18. INCOMPAS disagrees and argues that the relevant measure of competition in the supply of TDM transport is the proximity of competitive fiber to incumbent LEC wire centers rather than the proximity of fiber to buildings with BDS demand.⁵⁴ We find this argument to be misplaced. As the record demonstrates, while competitive LECs sometimes use transport links that are collocated at incumbent LEC wire centers, they often connect customers directly to their fiber facilities, effectively bypassing the incumbent LEC network.⁵⁵ For example, cable operators compete with price cap incumbent LECs for transport services, but do not rely on interconnection with incumbent LEC wire centers to provide service.⁵⁶ Commenters also observe competitors' increasing reliance on third party carrier hotels and data centers, which provide competitive LECs alternatives to incumbent LEC wire centers.⁵⁷ Therefore, using the proximity of price cap LEC wire centers to competitive LEC fiber to measure the competitiveness of TDM transport would, by itself, understate the level of competition for TDM transport by failing to account for competition that bypasses incumbent LEC networks.
- 19. Moreover, we agree with commenters that argue that our decision to measure the proximity of buildings with BDS demand to competitive fiber is "both more granular and more comprehensive" than the competitive LECs' alternative proposal to measure the proximity of incumbent

⁵¹ BDS Order, 32 FCC Rcd at 3496, para. 79 n.265.

⁵² *Id.* at 3480-82, 3512-13, paras. 41-45, 118-19.

⁵³ *Id.* at 3513, para. 119.

⁵⁴ INCOMPAS Feb. 8, 2019 Comments at 5; *see also* TPx May 9, 2019 Comments at 3, 6-7. *But cf.* Sprint May 9, 2019 Comments at 2.

⁵⁵ See CenturyLink Mar. 11, 2019 Reply at 6 ("If competitive transport extends to within a half mile of a customer location with BDS demand, and therefore can be profitably extended to fulfill that demand, there is no need to connect to the ILEC's end office to serve that customer. Instead, the competitor can bypass the ILEC's network altogether."); AT&T Feb. 8, 2019 Comments at 16 ("CLECs can and do build [laterals] that connect directly to 'competitive fiber at a 'splice point' on their networks rather than at ILEC central offices, as the CLECs themselves have repeatedly acknowledged."); CenturyLink Feb. 19, 2016 Reply at 30 ("If there is sufficient demand, carriers will naturally install interconnection points nearby when they deploy fiber, and even if they do not, it is still possible to add new splice points."); see also BDS Order, 32 FCC Rcd at 3479-82, paras. 40-43.

⁵⁶ AT&T Feb. 8, 2019 Comments at 5 ("[A] large portion of competitive transport, including virtually all cable transport, bypasses ILEC central offices today.").

⁵⁷ See, e.g., AT&T Mar. 11, 2019 Reply at 3, 6 ("CLECs... often bypass ILECs via carrier hotels and laterals that connect directly to their fiber transport networks."); CenturyLink Feb. 8, 2019 Comments at 7-8; USTelecom/ITTA Feb. 8, 2019 Comments at 5.

LEC wire centers to competitive fiber.⁵⁸ Our metric assesses competition at approximately 1.2 million locations with BDS demand whereas there are fewer than 16,000 price cap incumbent LEC wire centers.

- 20. In the interest in having as complete a record as possible, however, earlier this year, using data from the 2015 Collection, Commission staff included in the record the April Data Tables that show that the vast majority of locations with BDS demand are served by wire centers that were within a half mile of competitive fiber.⁵⁹ More specifically, staff analysis demonstrates that, in 2013, 75.7% of price cap LEC wire center locations were within a half mile of competitive fiber.⁶⁰ INCOMPAS's own analysis confirms this finding.⁶¹ Commission staff determined that only 5.6% of locations with BDS demand are likely served by incumbent LEC wire centers without competitive LEC fiber within a half mile.⁶² Staff further calculated that only 2.7% of all locations with BDS demand were either likely served by wire centers without nearby competitive fiber or were themselves not within a half mile of such fiber.⁶³
- 21. As CenturyLink explains, the "tables confirm that competitors can connect to the vast majority of ILEC central offices, and particularly those with meaningful demand for business services, to supplement their own competitive networks."⁶⁴ At the same time, the *April Data Tables* "dramatically understate competition for these services, as cable companies and other competitors frequently bypass ILEC networks entirely, eliminating the need for them to connect to ILEC wire centers to reach end-user

⁵⁸ See AT&T Mar. 11, 2019 Reply at 7; Frontier Mar. 11, 2019 Reply at 5.

⁵⁹ We refer to this fiber within a half mile herein as "competitive fiber," "nearby fiber," or "alternative fiber."

⁶⁰ For purposes of data made available in the data enclave, Commission staff masked CLLI codes due to the granularity of nearby fiber data provided in the *April Data Tables*. For purposes of remaining consistent with data available to the parties, we use a statistic based on wire center locations rather than unique wire centers. AT&T asserts that "'[t]he April Data Tables show that 78 percent of ILEC central offices are within a half-mile' of at least one competitive fiber network and/or a building served by competitive fiber." AT&T May 9, 2019 Comments at 9; *see also* Comments of CenturyLink May 9, 2019 Comments at 3; Frontier May 9, 2019 Comments at 3. These claims appear to be based on a calculation in a declaration attached to an *ex parte* letter filed by USTelecom in WC Docket No. 18-141, a calculation that Commission staff has been unable to readily reproduce. *See* Letter from Patrick R. Halley, Senior Vice President, Advocacy and Regulatory Affairs, USTelecom et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, Attach. A, Decl. of Glenn Woroch and Robert Calzaretta at 2 (filed May 6, 2019) (USTelecom May 6, 2019 *Ex Parte* Letter).

⁶¹ INCOMPAS May 9, 2019 Comments at 3. After confirming the results of the Commission staff's analysis, INCOMPAS backtracks on a portion of its analysis by excluding incumbent LEC wire centers located in areas subject to pricing flexibility prior to the *BDS Order*. *See id.* at 8 n.15. INCOMPAS argues that "34%[] of these end offices have *zero* competitive providers with fiber within a half-mile." *Id.* at 8. We disagree with this approach and find that deducting a significant proportion of wire centers from the data sample fails to provide a comprehensive picture of competition and distorts the results of our analysis.

⁶² Commission staff used a five-mile radius to estimate the number of locations served by each price cap wire center that lacked nearby competitive fiber. We believe this is a reasonable proxy for actual wire center boundary data, particularly given the fact that incumbent LECs commonly locate wire centers in areas with greater population density and therefore with more concentrated demand, including BDS demand. *Cf.* Frontier May 9, 2019 Comments at 3 ("[I]f one could weight the wirecenters based on actual percentage of transport traffic, the percentage of overall transport at these wirecenters would undoubtedly be significantly higher [than 78%].").

⁶³ Additionally, staff analysis showed that using a two-mile radius around wire centers to estimate BDS locations served by those wire centers resulted in there being approximately 1.7% of total BDS locations served by price cap wire centers without nearby fiber. *Cf.* AT&T Mar. 11, 2019 Reply at 13 (citing the Eighth Circuit's upholding of the Commission's elimination of ex ante price cap regulation for end user channel terminations when a significantly smaller percentage (50%) of buildings could be served by competitors).

⁶⁴ CenturyLink May 9, 2019 Comments at 3; *see also* AT&T May 9, 2019 Comments at 9-10; Frontier May 9, 2019 Comments at 2.

customers."⁶⁵ Moreover, the *April Data Tables* reflect only the competitive fiber that existed in 2013; as the record demonstrates, however, competitive fiber providers have continued to build new fiber routes in part to compete with incumbent LECs' BDS offerings.⁶⁶

- 22. Commenters challenge the validity of the Commission's *April Data Tables* on various grounds.⁶⁷ For example, INCOMPAS argues that without information about the distance between wire centers and the nearest splice point or interconnection point on the competitive provider's network, the *April Data Tables* understate the barriers to competitive entry.⁶⁸ INCOMPAS cites Commission precedent regarding using the distance to splice points to measure competition,⁶⁹ and notes the lack of splice point data in the record.⁷⁰
- 23. However, given the fact that fiber operators commonly install interconnection points at regular intervals on the fiber they deploy, measuring the distance to fiber is a reasonable proxy for measuring the distance to a splice point. As CenturyLink explains, installing an interconnection point on fiber is neither "particularly burdensome [nor] otherwise unachievable If there is sufficient demand, carriers will naturally install interconnection points nearby when they deploy fiber, and even if they do not, it is still possible to add new splice points." If further observes that "[e]stablishing a splice point generally does not significantly increase the cost of adding a new customer location to

⁶⁵ CenturyLink May 9, 2019 Comments at 3-4.

⁶⁶ *Id.* at 6-7; *see also* AT&T Mar. 11, 2019 Reply at 2 (The *2015 Collection* data "substantially understate the extent of competition, because they omitted significant cable company facilities that were deployed in 2013, nor do they include the substantial additional investment made by competitors since then.").

⁶⁷ See, e.g., Alaska Communications May 9, 2019 Comments at 2 (The April Data Tables "do[] not appear to accurately describe the extent of competitive facilities near Alaska Communications wire centers, particularly in the more remote price cap areas. . . . [P]ublicly-available data confirm the availability of competitive fiber in many of the Bush communities where the [April Data Tables] show no fiber-based competitor within a half-mile of the local Alaska Communications wire center."). It is not evident from the Alaska Communications comments, however, which wire centers they are referencing, and they provide no evidence showing the actual proximity of any of their wire centers to competitive fiber. We therefore have no basis for reassessing staff's analysis of distances between wire centers and competitive fiber. Alaska Communications adds that "[w]hile the April Data Tables are . . . incomplete . . . their inescapable conclusion is that TDM-based transport services in the state are overwhelmingly subject to competition." Alaska Communications May 28, 2019 Reply at 2. TPx objects to the Commission's use of the 2015 Collection in analyzing competition for BDS TDM transport services unless it is given "sufficient opportunity" to correct the data it submitted in response to the collection. See Letter from Tamer Finn, Counsel for U.S. TelePacific Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 et al., at 1 (filed Apr. 15, 2019) (TPx April 15, 2019 Ex Parte Letter). Parties submitting data to the Commission are responsible for ensuring the accuracy of their submissions, including correcting information that is subsequently found to be inaccurate. The Commission does not restrict parties' opportunities to discharge this fundamental obligation. TPx provided corrected data to the Commission on May 9, 2019, which staff uploaded to the secure data enclave. The correction involved a minute fraction of the total number of locations with BDS demand in the 2015 Collection (approximately 0.0005%), which were immaterial to the results of our analysis.

⁶⁸ INCOMPAS May 9, 2019 Comments at 9-10; *see also* Sprint May 9, 2019 Comments at 5-6; TPx May 28, 2019 Reply at 12.

⁶⁹ INCOMPAS May 9, 2019 Comments at 9 & nn.17-19. But see BDS Order, 32 FCC Rcd at 3520, para. 132 n.404.

⁷⁰ INCOMPAS May 9, 2019 Comments at 9-10.

⁷¹ Letter from Christopher T. Shenk, Counsel for AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143 et al., at 3 (filed Sept. 23, 2016) ("[A]s AT&T and others have documented, when providers deploy a BDS network in an area, basic economics and best engineering practices dictate the simple step of including splice points at regular intervals to ensure that the network is capable of serving existing and potential BDS demand in that area.") (AT&T Sept. 23, 2016 *Ex Parte* Letter).

⁷² CenturyLink Feb. 19, 2016 Reply at 30.

CenturyLink's network As a result, the need for a new splice point typically does not negatively affect the business case for deploying a fiber lateral to serve a new customer "73 These statements are unrebutted in the record. We believe the data on fiber locations represents the best data available to the Commission and find they provide a reasonable means by which to estimate competitive pressure generated by the proximity of competitive fiber.

- 24. We also find the suggestion that it is improper to include cable fiber in the *April Data Tables*, since cable providers do not collocate in incumbent LEC wire centers to sell transport, to be premised on an unnecessarily narrow and outdated view of competition that requires interconnection with the incumbent LEC. It misses the competitive pressure that nearby cable fiber exerts on the incumbent LEC regardless of whether it interconnects with the incumbent LEC. Competitive LEC fiber, including cable fiber, remains relevant to a competitive analysis regardless of whether competitors connect with incumbent facilities or bypass them.
- 25. We reaffirm the Commission's finding that the presence or reasonable proximity of a single competitor's facilities represents competition given the high sunk cost nature of BDS.⁷⁵ At the same time, as some commenters have pointed out, there are major urban areas with as many as 28 competitive transport providers, and second tier metropolitan areas with more than a dozen separate competitive transport providers.⁷⁶ While these data are discrete in nature, they are unquestionably relevant to our assessment of TDM transport competition. That some of these competitive providers may not *currently* "offer a substitute for interoffice DS1 and DS3 facilities in the MSA"⁷⁷ is of limited relevance given our view that TDM transport services are competitive due in part to the *potential* for providers to deploy transport when competitive LEC fiber exists within a half mile of BDS demand.⁷⁸ Moreover, the willingness of so many competitors to supply service in these markets is a general indicator of competitiveness and the increasing use of non-incumbent LEC networks for transport.⁷⁹
- 26. The 2015 Collection and other data submitted into the record before the adoption of the 2017 BDS Order necessarily do not account for competitive facilities deployed over the last several years. More recent record submissions show that competition for BDS transport services has continued to grow. 80 The current record shows, for example, that cable operators have "evolved from new entrants to

⁷³ Letter from Melissa E. Newman, Vice President-Federal Regulatory Affairs, CenturyLink, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143 et al., at 2-3 (filed Oct. 5, 2016); *see also* CenturyLink May 28, 2019 Reply at 11-12. Some commenters point to previous Commission statements regarding the importance of splice points in assessing competition. *See* INCOMPAS May 9, 2019 Comments at 9 ("'The distance to a fiber splice point, as opposed to fiber in general' is [an important] 'determining factor in build/buy decisions."') (quoting *Further Notice*, 31 FCC Red at 4815, para. 211 n.553). In so doing, they ignore the current record evidence which shows that network operators include splice points at regular intervals on their fiber networks to ensure they can meet BDS demand, and include slack fiber which allows more splice points to be added as needed. *See*, *e.g.*, CenturyLink May 28, 2019 Reply at 12 ("CenturyLink also minimizes the cost of adding *new* splice points by incorporating fiber 'slack' in its network, which also expedites the installation of splice points and generally avoids the need to disrupt service to customers already served on that fiber cable.").

⁷⁴ INCOMPAS May 9, 2019 Comments at 10.

⁷⁵ BDS Order, 32 FCC Rcd at 3501, para. 91.

⁷⁶ *Id.* at 3496-97, para. 79 (citing AT&T Oct. 25, 2016 *Ex Parte* Letter at 5).

⁷⁷ Sprint Feb. 8, 2019 Comments at 3.

⁷⁸ BDS Order, 32 FCC Rcd at 3482, para. 45 ("The record demonstrates that most business data services providers are willing and able to profitably invest and deploy facilities within a half mile of existing competitive facilities").

⁷⁹ See AT&T Mar. 11, 2019 Reply at 8-9 (explaining that "[t]he significance of this information is not that it is an MSA-level measurement, but that it confirms that many transport providers have overbuilt ILEC networks").

⁸⁰ See Second Further Notice, 33 FCC Rcd at 10456, para. 154 & n.389.

established providers of BDS "81 In the *BDS Order*, the Commission identified cable service as a substitute for BDS in areas with Metro Ethernet-enabled offerings and for lower speed TDM services but did not find "broad substitution" of cable best efforts services for BDS or "substantial performance similarities" between the two types of services. 82 Cable now competes for the full range of BDS, and, since it almost always bypasses the incumbent LEC network when it provides service, displaces incumbent LEC transport offerings when it takes a customer. In recent years, cable operators have invested billions of dollars in their hybrid fiber coax (HFC) networks which are now available in most areas where there is BDS demand and which can be repurposed to provide various levels of BDS with only incremental investment. 83 Comcast, for example, reports having invested billions of dollars "to increase network capacity," resulting in "the largest facilities-based last mile alternative to the phone company." Charter Spectrum reportedly spent over \$1 billion in 2018 in new fiber infrastructure to increase the density of its national fiber network. Cox is reported to be planning to invest an additional \$10 billion into its network over the next five years.

- 27. According to a recent industry analyst report, "[c]able companies are leveraging [their] ubiquitous HFC and rapidly expanding fiber networks to gain share in the [BDS] market."⁸⁷ It states that "[a]ll major [cable operators] are focused on expanding their network footprints and speed offerings, and Comcast, Cox and other cable companies are working to increase the capacities of their Ethernet over HFC offerings."⁸⁸ The report also projects that cable providers are "expected to see share gains across markets, with continued expansion and upgrades of fiber and HFC footprint and focus on growing business and wholesale traction."⁸⁹
- 28. As a result of this aggressive investment, cable's BDS revenues and share of BDS revenues have steadily increased. Cable operators' BDS revenues more than doubled from approximately \$8 billion in 2013 to more than \$18 billion in 2018 and could reach \$20 billion by the end of 2019.90

⁸¹ CenturyLink Feb. 8, 2019 Comments at 9.

⁸² BDS Order at 3474-75, para. 31. The 2015 Collection included data related to certain types of cable facilities but did not include data on cable "best efforts" services and facilities. See AT&T Mar. 11, 2019 Reply at 5-6 (The 2015 Collection "omitted significant cable facilities, and do[es] not include the billions of dollars in BDS transport investments since 2013."); Frontier Mar. 11, 2019 Reply at 2-3.

⁸³ See CenturyLink May 9, 2019 Comments at 8.

⁸⁴ AT&T Feb. 8, 2019 Comments at 8-9 (citing Comcast Business, *The* [*Nationwide Fiber-Optic*] *Network*, https://business.comcast.com/about-us/our-network (last visited May 9, 2019)).

⁸⁵ Id at 9.

⁸⁶ *Id.* at 9 (citing Alan Bresnick, Cox Hits Gas on Gigabit Rollout, LightReading (Jan. 10, 2018), *available at* https://lightreading.com/cable/docsis/cox-hits-gas-on-gigabit-rollout/d/d-id/739577).

⁸⁷ CenturyLink May 9, 2019 Comments at 7 (quoting Atlantic-ACM, U.S. Telecom Wireline and Wireless Sizing and Share Forecast: 2018-2023, at 80 (Oct. 2018) (Atlantic-ACM 2018-2023 Forecast)).

⁸⁸ Id. at 6 (quoting Atlantic-ACM 2018-2023 Forecast at 80).

⁸⁹ Id. at 7 (quoting Atlantic-ACM 2018-2023 Forecast at 27).

⁹⁰ Jeff Baumgartner, Light Reading, US Cable Set to Rake in \$18B in Biz Services Revenues in 2018 at 1 (November 5, 2018), available at https://www.lightreading.com/cable/cable-businewss-services/us-cable-set-to-rake-in-\$18b-in-biz-services-revenues-in-2018/d/d-id/747602 (Light Reading/Baumgartner). An analyst stated that "Comcast Business alone is on an annual run rate of \$7.2 billion [in BDS revenues], with Charter Communications Inc. (Spectrum Enterprise), at about \$6.2 billion." See Light Reading/Baumgartner at 1.

Atlantic-ACM projects that from 2017 to 2023, cable operators' share of all BDS revenues will grow from 19.7% to an estimated 30.7%. ⁹¹ In 2017 alone, cable BDS revenue growth was 10.6%. ⁹²

- 29. Traditional competitive LEC's BDS offerings have also increased over the past two years. As one analyst report declares, "CLECs are aggressively expanding their footprints via network builds or M&A while ILECs are attempting to remain competitive by making major investments to prepare their networks for 5G." Fiber-based competitive LECs such as Zayo and Uniti Fiber have deployed significant additional facilities and continue to grow their share of BDS revenues. Azyo reported a 38% increase in fiber route miles from December 2015 (95,000 miles) to November 2018 (131,100 miles). Moreover, as commenters have also observed the increased use of carrier-neutral facilities such as third-party carrier hotels and data centers that bypass incumbent LEC facilities, further suggesting competitive pressure from competitive LECs.
- 30. As the Commission did in the *BDS Order*, we consider packet-based transport services to be broadly substitutable for TDM-based transport services.⁹⁷ Substitution between these two types of services is generally in one direction,⁹⁸ and we find that "circuit- and packet-switched business data services that offer similar speed, functionality, and quality of service characteristics fall within the same product markets"⁹⁹ for the purposes of the market analysis relevant here. Indeed, TDM transport services can be carried over fiber, so fiber providers can offer customers TDM services.
- 31. There is an ongoing steady decline in demand for TDM transport and increase in demand for packet-based alternatives. One analyst forecasts that legacy TDM transport will decline from \$3.2 billion to \$1.2 billion from 2017 to 2023. This forecast is supported by data submitted to the record by BDS providers. For example, according to CenturyLink, between 2015 and 2018, its incumbent LEC revenues for TDM transport dropped 9% annually and demand for DS1 and DS3 services "has been declining for years as customers migrate to Ethernet and other packet-based services that are easily

⁹¹ CenturyLink May 9, 2019 Comments at 7 (quoting *Atlantic-ACM 2018-2023 Forecast* at 27, 132). INCOMPAS states that "the percent of locations served by competitive HFC facilities is 'less than five percent' of the total number of collocations served by facilities-based providers." INCOMPAS Feb. 8, 2019 Comments at 9-10 (citing *BDS Order*, 32 FCC Rcd at 3520, para. 132 n.401). INCOMPAS cites a subset of BDS substitute services offered by cable operators that the Commission analyzed separately from other cable BDS offerings. *See BDS Order*, 32 FCC Rcd at 3473-74, paras. 27-29. Taken out of context, this is a misleading reference to cable's ability to provide BDS offerings.

⁹² USTelecom/ITTA Mar. 11, 2019 Reply at 4 (citing Moffett Nathanson Report at 6, Exh. 4).

⁹³ CenturyLink May 9, 2019 Comments at 7 (quoting Atlantic-ACM 2018-2023 Forecast at 45).

⁹⁴ See id. at 7 (quoting Atlantic-ACM 2018-2023 Forecast at 148).

⁹⁵ AT&T Feb. 8, 2019 Comments at 9 (citing Zayo November 2018 10Q and February 2017 10Q, available at https://investors.zayo.com/financials-and-results/sec-filings/default.aspx (last visited May 9, 2019); see also CenturyLink Feb. 8, 2019 Comments at 11 n.50 (describing the "intense competition" among fiber-based competitive LECs).

⁹⁶ AT&T Feb. 8, 2019 Comments at 3; USTelecom/ITTA Feb. 8, 2019 Comments at 5 ("[C]arrier hotels offer multiple paths to avoid or minimize the use of ILEC transport networks.").

⁹⁷ BDS Order, 32 FCC Rcd at 3471, para. 24.

⁹⁸ See id. at 3471, para. 25 ("New customers, more likely than not, are choosing to purchase Ethernet services subject to their availability and pricing, and existing customers of TDM-based service are switching to Ethernet. There is no evidence suggesting Ethernet customers are switching to DS1s and DS3s.").

⁹⁹ Id.

¹⁰⁰ CenturyLink May 9, 2019 Comments at 8 (citing Atlantic-ACM 2018-2023 Forecast at 16).

scalable to meet their growing bandwidth needs."¹⁰¹ Similarly, AT&T reports that its "revenues for DS1 and D[S]3 transport have continued to decline substantially since 2015 due to the availability of competitive alternatives and the fact that many competitors (e.g., cable companies) do not purchase much transport from ILECs at all."¹⁰²

- 32. In light of the record of continued aggressive deployment by competitors of BDS-capable network facilities since the *BDS Order*,¹⁰³ we find unpersuasive arguments that our analysis fails to sufficiently consider the barriers to supplying TDM transport and whether those barriers identified are significant enough to prevent robust competition.¹⁰⁴ As the Commission previously explained, while entry barriers to BDS supply may seem high, competitors nonetheless frequently choose to make significant investment to enter these markets.¹⁰⁵ And, given that transport services typically connect points of traffic aggregation and therefore offer relatively greater revenue opportunity than end user channel terminations, barriers to entry to supply transport are lower than for other types of BDS.¹⁰⁶ Additionally, because fiber connections are a sunk cost, and it is efficient to deploy many more strands than are initially used, once competitors deploy facilities, they have every incentive to price competitively (as do the incumbents against whom they compete).¹⁰⁷
- 33. Some commenters' arguments about barriers to entry are based on an unjustifiably narrow view of BDS transport competition which is premised on competition that is interconnected with, and therefore dependent on, incumbent LEC infrastructure.¹⁰⁸ This argument ignores substantial and growing evidence that competitors often bypass the incumbent LEC network entirely.¹⁰⁹ Indeed, as the Commission has previously recognized, "cable operators self-provision all aspects of their BDS, including transport functionality," and therefore do not rely on incumbent LEC central offices to offer competitive TDM transport services¹¹⁰ and competitive LECs are increasingly bypassing incumbent LEC

¹⁰¹ CenturyLink Feb. 8, 2019 Comments at 2, 12. Additionally, as a major purchaser of TDM transport outside its incumber LEC footprint, CenturyLink's "procurement of TDM-based transport at DS3 capacity and below from unaffiliated providers fell an average of 10% annually" from 2015 to 2018. CenturyLink May 9, 2019 Comments at 8-9.

¹⁰² AT&T Mar. 11, 2019 Reply at 9 n.21; see also Alaska Communications May 28, 2019 Reply at 7.

¹⁰³ See, e.g., Alaska Communications Jan. 30, 2019 Comments at 6-7; AT&T Feb. 8, 2019 Comments at 8-9; CenturyLink Feb. 8, 2019 Comments at 8-12.

¹⁰⁴ INCOMPAS Feb. 8, 2019 Comments at 12-13.

¹⁰⁵ BDS Order, 32 FCC Rcd at 3484-85, para. 54 (citing "evidence of extensive competitive entry into the business data services marketplace").

 $^{^{106}}$ Second Further Notice, 33 FCC Rcd at 10454, para. 148; Pricing Flexibility Order, 14 FCC Rcd at 1478-79, para. 102.

¹⁰⁷ BDS Order, 32 FCC Rcd at 3484-85, para. 54. Anything a carrier earns in excess of the relatively minor cost of adding another traffic stream to an existing strand of lit fiber, or of lighting a new strand, augments its profits.

¹⁰⁸ See, e.g., INCOMPAS Feb. 8, 2019 Comments at 12 ("This in turn requires that a competitive provider has collocated in the ILEC end office where the channel termination is located, and that competitor can obtain a cross-connect to connect its collocated equipment to the ILEC channel termination." (internal quotation marks omitted)).

¹⁰⁹ See, e.g., AT&T Mar. 11, 2019 Reply at 3, 6 ("[C]able companies almost always bypass ILEC networks entirely, and . . . CLECs likewise often bypass ILECs via carrier hotels and laterals that connect directly to their fiber transport networks."); CenturyLink Feb. 8, 2019 Comments at 7-8; Verizon March 11, 2019 Reply at 4.

¹¹⁰ Second Further Notice, 33 FCC Rcd at 10456, para. 154. INCOMPAS argues that the Second Further Notice did not indicate the number of counties that have existing cable operator facilities to satisfy the competitive market test. INCOMPAS Feb. 8, 2019 Comments at 7. However, the competitive market test as developed in the BDS Order is inapplicable in the transport context, and reference to it alone does not call into question whether cable entrants demonstrate a lower threshold for new entrants to these markets.

infrastructure.¹¹¹ As AT&T explains, "CLECs do not need to collocate in ILEC central offices, or to replicate ILEC transport paths, in order to provide a competitive alternative that disciplines ILEC rates."¹¹²

Finally, we find unpersuasive the assertion by some commenters that incumbent LECs 34. retain market power over DS1 and DS3 channel terminations, which they contend extends to TDM transport, thus rendering some TDM transport markets noncompetitive. 113 As an initial matter, the Commission's competitive market test in the BDS Order, which was upheld on appeal by the Eighth Circuit, determined that 91.1% of locations with DS1 and DS3 end user channel termination demand were competitive. 114 In support of their position, these commenters argue that the market analysis conducted by Dr. Marc Rysman on behalf of the Commission showed that incumbent LECs exercised some market power over DS1 and DS3 services.¹¹⁵ The conclusions they cite from the Rysman study, however, were specific to DS1 and DS3 channel terminations. Moreover, as the Commission explained in the BDS Order, the data used in Dr. Rysman's analysis were examined by peer reviewers and were found to be "too noisy to draw any firm conclusions," and therefore the Commission chose not to rely on these to draw conclusions about markets for DS1 and DS3 services. 116 Additionally, Dr. Rysman's analysis was based on pricing data for full circuit service which combined data for channel termination, transport, and other services. Dr. Rysman did not attempt to draw conclusions specific to TDM transport. 117 In fact, Dr. Rysman removed from his study all data specific to standalone transport services "because the cost structure behind providing transport is likely to be substantially different from providing service to enduser premises and therefore would make comparisons of prices less meaningful."118

B. Removing Ex Ante Pricing Regulation

35. Given our finding that the supply of TDM transport services is sufficiently competitive across the country that the continued application of ex ante pricing regulation would do more harm than good, and consistent with the recommendation made by numerous commenters, 119 we reaffirm the Commission's decision in the *BDS Order* to remove ex ante pricing regulation of BDS TDM transport

¹¹¹ See BDS Order, 32 FCC Rcd at 3498, para. 81 & n.273 (observing that a competitive provider need not be collocated in the incumbent LEC's wire center and can instead bypass the incumbent facilities).

¹¹² AT&T Feb. 8, 2019 Comments at 16 ("For example, as noted, the record shows that cable companies generally deploy their own transport facilities that essentially duplicate ILEC paths."); CenturyLink Feb. 8, 2019 Comments at 9-12 (citing Atlantic-ACM and other data demonstrating revenue growth and revenue-share growth by cable providers); *see also* AT&T Mar. 11, 2019 Reply at 16-17 ("The fact that numerous competitors have deployed transport to within a half mile of most buildings with BDS demand in price cap areas overwhelmingly confirms that entry barriers do not impede competition in price cap areas.").

¹¹³ INCOMPAS Feb. 8, 2019 Comments at 5 ("ILECs' market power over DS1 and DS3 channel terminations, as a practical matter, frequently extends to interoffice transport needed to carry traffic from those channel terminations."); Sprint Feb. 8, 2019 Comments at 6-7 ("[T]he FCC analysis showing that ILECs possess significant market power over DS1 and DS3 services evaluated the marketplace at the level of the full BDS circuit, including transport rate elements.").

¹¹⁴ BDS Order, 32 FCC Rcd at 3525, para. 141.

¹¹⁵ INCOMPAS Feb. 8, 2019 Comments at 6; see Revised Rysman Study at 3.

¹¹⁶ BDS Order, 32 FCC Rcd at 3493, para. 74.

¹¹⁷ See AT&T Mar. 11, 2019 Reply at 4 (Dr. Rysman "explicitly stated that his analysis did not separately analyze ILEC transport pricing.").

¹¹⁸ Revised Rysman Study at 37; *see also BDS Order*, 32 FCC Rcd at 3495-96, para. 78 ("Dr. Rysman also acknowledged the relevance of this distinction in his paper.").

¹¹⁹ See, e.g., AT&T Feb. 8, 2019 Comments at 6; Frontier May 9, 2019 Comments at 2; USTelecom/ITTA Feb. 8, 2019 Comments at 5-6; Verizon Feb. 8, 2019 Comments at 2-3.

and other transport (i.e., non-end user channel termination)¹²⁰ services in price cap areas nationwide.¹²¹ The record does not support allegations made by some commenters that "stark differences" in competitive conditions in different areas preclude the nationwide removal of ex ante pricing regulation.¹²² It does demonstrate, as the Commission recognized in the BDS Order, that an extremely small percentage of buildings with BDS demand in price cap areas may face the prospect of no regulatory constraint on incumbent LEC prices for TDM transport and no immediate prospect of a competitive alternative. 123 We believe, however, that the costs of imposing ex ante pricing regulation far exceed the benefits of continued regulation of price cap LECs' TDM transport services. 124 Imposing inflexible and burdensome ex ante pricing regulation on TDM transport services would harm the dynamic competitive nature of these markets, could lead to a decrease in new entrants, 125 and would likely delay the transition from TDM- to IP-based offerings. 126 To the limited extent there remain locations where there is not an immediate competitive threat, the Commission has previously explained that we anticipate reasonably competitive outcomes in the short- to medium-term (i.e., over several years) will discipline prices. 127 As a result, we find that such locations do not preclude our adoption of a nationwide solution. ¹²⁸ Moreover, as the Commission previously recognized, "our goal is not absolute mathematical precision but an administratively feasible approach that avoids imposing undue regulatory burdens on this highly competitive segment of the market."129 Refraining from pricing regulation for TDM transport services in price cap areas nationally achieves the proper balance between precision and administrability, particularly given the fact that parties continue to be able to file complaints with the Commission pursuant to section 208 of the Act.

36. As a result, we do not support proposals that we adopt a competitive market test for TDM transport services. The fact that the Commission adopted a competitive market test for TDM channel terminations in price cap areas does not compel the adoption of a competitive market test for TDM transport services. The Commission has always distinguished its analysis and regulation of these markets

¹²⁰ See Letter from Karen Brinkmann, Counsel for Alaska Communications, to Marlene H. Dortch, Secretary, FCC, WC Docket. Nos. 18-141 et al. at 2-3 (filed June 21, 2019) (Alaska Communications June 21, 2019 Ex Parte Letter).

¹²¹ See BDS Order, 32 FCC Rcd at 3495-98, 3500-02, paras. 77-82, 90-93.

¹²² INCOMPAS Feb. 8, 2019 Comments at 14; see also Sprint Feb. 8, 2019 Comments at 2, 6.

¹²³ See AT&T Feb. 8, 2019 Comments at 11; CenturyLink Feb. 8, 2019 Comments at 13; Frontier Mar. 11, 2019 Reply at 3.

¹²⁴ See, e.g., Verizon Feb. 8, 2019 Comments at 1, 5-7 ("Verizon and other providers have already withdrawn or revised their tariffs, made new price-cap regulatory filings, and modified their billing systems Reversing this would require months of effort and would inconvenience customers.").

¹²⁵ BDS Order, 32 FCC Rcd at 3501, para. 92 (observing the potential for "the discouragement of competitive entry over time"); see also AT&T Feb. 8, 2019 Comments at 11; Alaska Communications Jan. 30, 2019 Comments at 5; CenturyLink Feb. 8, 2019 Comments at 13; Frontier Mar. 11, 2019 Reply at 3.

¹²⁶ Alaska Communications Jan. 30, 2019 Comments at 5 (arguing that continuing pricing regulation could "prolong the technology transition that the Commission is otherwise trying to catalyze"); Frontier Mar. 11, 2019 Reply at 3.

¹²⁷ BDS Order, 32 FCC Rcd at 3516, para. 124.

¹²⁸ *Id.* at 3501-02, paras. 92-93 ("While competition may not be universal, it is sufficiently widespread for us to have confidence that a combination of these factors will broadly protect against the risk of supracompetitive rates being charged by price cap LECs over the short- to medium-term. To the extent there are points of aggregation that are not served by competitors, the relatively high demand at these points makes it likely that a competitor could justify investing in competitive transport facilities to serve that demand.").

¹²⁹ *Id.* at 3502, para. 93; see also AT&T Mar. 11, 2019 Reply at 13.

¹³⁰ INCOMPAS Feb. 8, 2019 Comments at 14-16; Sprint Feb. 8, 2019 Comments at 7; Sprint May 28, 2019 Reply at 6.

and presuming that a test for one set of services means that a competitive market test for the other is necessary or even possible, wrongly conflates the two. Indeed, commenters that support a competitive market test for TDM transport concede that a "competitive market test for transport should be distinct from that used for channel termination given the differences between the two types of services." Moreover, they claim that the record "does not[] contain data on the extent of competition by different transport service providers" and urge the Commission to "further develop the record." ¹³³

- 37. We see no benefit to prolonging this long-running proceeding to conduct a further data collection for TDM transport services. Given the very significant burdens and delays involved in the Commission's 2015 Collection, the benefits of collecting additional data on TDM transport competition to develop a separate TDM transport competitive market test would need to be substantial to justify the burdens of such a collection. Commission staff analysis of the 2015 Collection shows that only 2.7% of locations with BDS demand in price cap areas in 2013 were neither served by a wire center that was within a half mile of competitive fiber nor were themselves within a half mile of competitive fiber. With competition this extensive, the burdens of a major data collection and of developing and administering a competitive market test for TDM transport services clearly outweigh the benefits.
- 38. This is particularly true because some commenters arguing for a competitive market test urge us to adopt a route-based test for TDM transport services based on transport routes connecting incumbent LEC wire centers. They argue that the relevant geographic market for TDM transport services is "the route between two ILEC end offices and not the area within a given distance from a customer's location."¹³⁶ The providers that suggest adoption of such a test do not explain—even in broad terms—how it would be structured, ¹³⁷ on what evidence it could be based, or how it could be feasibly administered. ¹³⁸ Neither do they acknowledge that the incumbent LEC-centric nature of such a test would not account for competitors that bypass incumbent LEC infrastructure. ¹³⁹ Nor do they take into account

¹³¹ INCOMPAS Feb. 8, 2019 Comments at 14-16.

¹³² *Id*.

¹³³ *Id.* at 15.

¹³⁴ In the *BDS Order*, we stated that a competitive market test for transport would involve "a significant additional complication [which] does not appear warranted for a market that has seen considerable competitive investment and has been largely deregulated for much of the past 15 years under our current pricing flexibility rules." *BDS Order*, 32 FCC Red at 3502, para. 92 n.294.

¹³⁵ See AT&T Mar. 11, 2019 Reply at 10-11 ("[T]here is no feasible geographic subdivision that could serve as the basis for regulation that could reasonably target the small number of buildings with BDS demand that do not currently have access to competitive alternatives."); USTelecom/ITTA Mar. 11, 2019 Reply at 5.

¹³⁶ INCOMPAS Feb. 8, 2019 Comments at 15; Sprint May 9, 2019 Comments at 3-4.

¹³⁷ See INCOMPAS Feb. 8, 2019 Comments at 15-16 (arguing that the tests for channel termination and transport should be "distinct" and recommending that a potential transport test rely on "actual indicators of transport competition within the appropriate geographic unit"); Sprint Feb. 8, 2019 Comments at 7-8 (Sprint "supports the application of some kind of competitive market test in price cap areas at the bare minimum"). But see AT&T Mar. 11, 2019 Reply at 14 ("If INCOMPAS and Sprint believe there is a better approach that addresses the need for administrability and that maintains incentives for investment and innovation, the burden is on them to identify that better approach."); Verizon Mar. 11, 2019 Reply at 2 ("[Competitive LECs] instead urge the FCC to develop a new framework for analyzing TDM transport competition, and to collect new data to support that new analysis. The Commission is not required to do so" (footnote omitted)).

¹³⁸ See AT&T Feb. 8, 2019 Comments at 15.

¹³⁹ Competitive LECs also propose an alternative basis for a TDM transport market test based on "actual indicators of transport competition within the appropriate geographic unit, including the relevant distance between the competitive fiber and the ILEC end office." INCOMPAS Feb. 8, 2019 Comments at 16. As previously discussed, Commission staff conducted such an analysis using the 2015 Collection, which showed that only 2.7% of locations (continued....)

the fact that price cap LECs "generally do not price their transport services on a route-by-route basis." Given the evidence of extensive and still growing competition for transport services in the vast majority of the areas served by price cap carriers where there is BDS demand, we cannot justify imposing burdensome new ex ante pricing regulation on BDS offerings based on the results of a test that will not actually be able to identify where there are failures in the transport market, but could inhibit investment in this dynamic marketplace.

- We also reject arguments made by some commenters that nationwide deregulation of TDM transport will have secondary consequences for the pricing of channel terminations in those price cap counties that the BDS Order deemed insufficiently competitive to warrant removal of ex ante pricing regulation. These parties argue that eliminating pricing regulations for TDM transport would allow price cap LECs to evade the price caps that remain on channel terminations in areas deemed non-competitive by allowing them to impose offsetting rate increases on TDM transport services in those counties.¹⁴¹ We find this reasoning flawed. The argument assumes that, if a provider tried to charge supracompetitive rates on transport services to compensate for price-capped channel terminations, competitors would not respond to such increased transport prices with additional investment in transport facilities. However, given the evidence of widespread competitive entry for BDS transport, there is reason to believe that the likely result of a price cap LEC charging supracompetitive rates on transport services would be the entry of a competitor with the capacity to bypass facilities being added in response. 142 The competitive LECs' view of the BDS marketplace ignores the evidence of competitive pressure in the record. Moreover, in the more than two years since the adoption of the BDS Order, ex ante pricing regulation of TDM transport has been largely removed in price cap areas, even in counties where the Commission retained price cap regulation over price cap LECs' DS1 and DS3 channel terminations. Yet, competitive LECs cite no instance where deregulating transport rates has undercut price cap regulation of channel terminations. 143 In light of this experience, the competitive LECs' concern seems speculative.
- 40. Refraining from pricing regulation for TDM transport services nationwide achieves the proper balance between precision and administrability.¹⁴⁴ It also avoids unnecessary disruption of existing BDS transport sales arrangements. And, as one commenter explains, the "risks of overregulation of these services would outweigh any marginal benefit from" reinstating ex ante pricing regulation "in this highly competitive sector, by artificially tamping down TDM transport rates, thereby deterring

¹⁴⁰ AT&T Feb. 8, 2019 Comments at 13.

¹⁴¹ INCOMPAS Feb. 8, 2019 Comments at 13-14 ("Deregulating pricing for transport services nationwide eliminates the effect of price caps on channel terminations in those counties that are deemed not competitive"); Sprint Feb. 8, 2019 Comments at 9-10.

¹⁴² See BDS Order, 32 FCC Rcd at 3468, para. 14 ("[W]here an incumbent sets supracompetitive prices it is vulnerable to competitors vying for customers.").

¹⁴³ The competitive LECs assert more generally that BDS rates for TDM channel terminations and transport services have increased since the release of the *BDS Order*. *See* Sprint Feb. 8, 2019 Comments at 8. With the evidence of widespread competition that we cite in this Order for TDM transport and in the *BDS Order* for TDM channel terminations, particularly competition that bypasses incumbent LEC infrastructure, we do not believe these increases will be long-term. They are more likely to create opportunities for competitors to undercut incumbent LEC prices in the short- to medium-term.

¹⁴⁴ See AT&T Feb. 8, 2019 Comments at 11; CenturyLink Mar. 11, 2019 Reply at 3; Verizon Mar. 11, 2019 Reply at 3.

competitive entry and slowing the IP migration."¹⁴⁵ Instead, we believe that providing regulatory relief in this market segment will foster conditions that will continue to encourage competitive entry and provide incentive for further investment in fiber transport facilities.

41. Finally, as we previously observed in the *BDS Order*, price cap LECs' TDM transport services continue to be subject to sections 201, 202 and 208 of the Communications Act.¹⁴⁶ These statutory provisions prohibit carriers from imposing rates, terms, and conditions that are unjust, unreasonable, or unreasonably discriminatory.¹⁴⁷

C. Forbearance from Tariffing

- 42. To effectuate the approach we take to TDM transport, and consistent with the approach the Commission took in the *BDS* Order, pursuant to section 10 of the Communications Act, ¹⁴⁸ we forbear from applying section 203 of the Act and our tariffing requirements to price cap incumbent LECs in their provision of BDS TDM transport services. ¹⁴⁹ This forbearance relieves price cap LECs of the requirement to file interstate tariffs for these services nationwide.
- 43. The Commission has a long history of granting price cap LECs forbearance from tariffing requirements for various of their BDS offerings. More than a decade ago, the Commission provided grants of forbearance to price cap LECs for their packet-switched and optical transmission BDS. Two years ago, in the *BDS Order*, the Commission granted price cap LECs forbearance from the Act's tariffing obligations with respect to the provision of packet-based and higher speed TDM BDS, lower speed TDM transport, and DS1 and DS3 end user channel termination services in counties deemed

¹⁴⁵ CenturyLink Feb. 8, 2019 Comments at 13.

¹⁴⁶ See BDS Order, 32 FCC Rcd at 3500, para. 89; see also AT&T Feb. 8, 2019 Comments at 13; CenturyLink Feb. 8, 2019 Comments at 13-14.

¹⁴⁷ See 47 U.S.C. §§ 201, 202, 208.

¹⁴⁸ *Id.* § 160.

¹⁴⁹ *Id.* § 203.

¹⁵⁰ See Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services; Petition of BellSouth Corp. for Forbearance Under Section 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services, Memorandum Opinion and Order, 22 FCC Rcd 18705, 18705-07, paras. 1-2 (2007) (AT&T Forbearance Order), aff'd sub nom. Ad Hoc v. FCC, 572 F.3d 903 (D.C. Cir. 2009); Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Application of Computer Inquiry and Certain Title II Common-Carriage Requirements; Petition of the Frontier and Citizens ILECs for Forbearance under Section 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Their Broadband Services, Memorandum Opinion and Order, 22 FCC Red 19478 (2007), aff'd sub nom. Ad Hoc v. FCC 572 F.3d 903; Owest Petition for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Broadband Services, Memorandum Opinion and Order, 23 FCC Rcd 12260 (2008) (Owest Forbearance Order); Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as Amended (47 U.S.C. §160(c)), for Forbearance from Certain Dominant Carrier Regulation of Its Interstate Access Services, and for Forbearance from Title II Regulation of Its Broadband Services, in the Anchorage, Alaska, Incumbent Local Exchange Carrier Study Area, Memorandum Opinion and Order, 22 FCC Rcd 16304 (2007); Press Release, FCC, Verizon Telephone Companies' Petition for Forbearance from Title II and Computer Inquiry Rules with Respect to their Broadband Services Is Granted by Operation of Law, WC Docket No. 04-440 (Mar. 20, 2006), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-264436A1.pdf. CenturyLink also received similar relief when its forbearance petition was deemed granted by operation of law in 2015. See Press Release, FCC, CenturyLink's Petition for Forbearance from Dominant Carrier Regulation and the Computer Inquiry Tariffing Requirement with Respect to its Enterprise Broadband Services is Granted by Operation of Law, WC Docket No. 14-9 (Mar. 16, 2015); CenturyLink's Petition for Forbearance Pursuant to 47 U.S.C. § 160(c) from Dominant Carrier Regulation and Computer Inquiry Tariffing Requirements on Enterprise Broadband Services, WC Docket No. 14-9 (filed Dec. 13, 2013), available at https://www.fcc.gov/ecfs/filing/6017583444/document/7521065850.

competitive by the Commission's competitive market test.¹⁵¹ Based on the record before us, we find that the statutory test for granting forbearance from tariffing obligations for price cap LECs' TDM transport services has been met.

- 44. First, we find that the widespread existence of competitive alternatives to incumbent LECs' BDS TDM transport offerings means that the application of section 203 of the Act is not necessary to ensure that the charges and practices for price cap LECs' transport services are just and reasonable and not unreasonably discriminatory. Congress enacted section 203 of the Act in an era when tariffs "were required to protect consumers from unjust, unreasonable, and discriminatory rates in a virtually monopolistic market." Over time, the Commission progressively modified its regulation of price cap LECs' BDS to reflect increasing levels of competition in the supply of BDS, and therefore, the reduced need for the protections tariffs that provide. The record demonstrates that current market forces will better ensure that prices for TDM transport offered by price cap LECs are just and reasonable and not unreasonably discriminatory than (necessarily) blunt regulatory measures. 153
- 45. Second, for many of the same reasons, we find that enforcement of our tariffing requirements for price cap LECs' BDS TDM transport services is "not necessary for the protection of consumers," and forbearance will benefit consumers. Widespread and increasing competition to BDS services will drive down prices and provide competitive alternatives to those services, which in turn benefits consumers. Moreover, forbearance from tariffing will allow price cap carriers to respond more quickly to competition and be more innovative in the services they offer, also benefitting consumers. Additionally, price cap LEC BDS TDM transport offerings will remain subject to sections 201, 202, and 208 of the Act and to our enforcement of those provisions through the section 208 complaint process.
- 46. Third, we find that granting forbearance for price cap LECs' BDS TDM transport services from section 203 of the Act is consistent with the public interest and will promote competitive market conditions. As the Commission found in the *BDS Order*, forbearance from tariffing obligations for TDM transport will promote further BDS competition and deployment in price cap LEC areas. Moreover, tariffing can adversely impact competitive markets by reducing a carrier's incentives to offer price discounts, delaying and increasing the costs of innovation, and inhibiting a carrier from tailoring services to best meet customers' needs. Further, tariffing itself is not without its costs. Forbearing from section 203 and our tariffing rules will reduce unnecessary administrative costs, which can be significant, and allow carriers to redirect their resources to deploying service capabilities and providing service. We continue to adhere to our view that disparate forbearance treatment of carriers providing the same or similar services is not in the public interest, as it creates distortions in the marketplace that may harm consumers. Accordingly, the continued application of section 203 is unnecessary under sections

¹⁵¹ See BDS Order, 32 FCC Rcd at 3529-33, paras. 155-65.

¹⁵² AT&T Forbearance Order, 22 FCC Rcd at 18724, para. 30 n.124.

¹⁵³ See, e.g., AT&T Feb. 8, 2019 Comments at 3-4; CenturyLink Feb. 8, 2019 Comments at 1-2; Alaska Communications Jan. 30, 2019 Comments at 10 (arguing that prices are just and reasonable and not unreasonably discriminatory because they "comport with the common carrier standards set forth in Sections 201(b) and 202(a) of the Communications Act").

¹⁵⁴ 47 U.S.C. § 160(a)(2).

¹⁵⁵ BDS Order, 32 FCC Rcd at 3532, para. 163.

¹⁵⁶ According to Verizon, for example, "dismantling [Verizon's] current billing logic for transport and reinstituting logic consistent with the prior regime would take months to complete." Verizon Feb. 8, 2019 Comments at 6; *see also* AT&T Feb. 8, 2019 Comments at 19 ("[A]ny decision to *re*-tariff transport now . . . would be extremely disruptive and burdensome.").

¹⁵⁷ See BDS Order at 3531, para. 158 & n.438 (citing Qwest Forbearance Order, 23 FCC Rcd at 12292, para. 65).

10(a)(3) and 10(b). Because we find that each of the elements of the section 10 forbearance analysis is satisfied, we must grant forbearance from section 203 tariffing requirements.

D. Transition to Mandatory Detariffing

- 47. To ensure an orderly transition to a fully detariffed regulatory regime for price cap LECs' TDM transport offerings, we adopt mechanisms that align with those the Commission adopted in the *BDS Order*. ¹⁵⁸ As in the *BDS Order*, we also require competitive LECs, which are subject to permissive detariffing, to detariff their remaining transport BDS offerings by the end of this transition. ¹⁵⁹ In so doing, we recognize that many price cap LECs have already detariffed their TDM transport in response to the *BDS Order* and these services have remained detariffed given the Eighth Circuit's temporary stay of its partial remand. ¹⁶⁰ For those price cap LECs that have not already detariffed their TDM transport, we adopt a new transition period that will begin on the effective date of this Order (which will be 30 days after publication of this Order in the Federal Register) and will end on August 1, 2020, the date of the transition period mandated by the *BDS Order* for mandatory detariffing.
- 48. During this transition, tariffing for TDM transport services by carriers will be permissive—we will accept new tariffs and revisions to existing tariffs for the affected services. Price cap LECs will no longer be required to comply with price cap regulation for their TDM transport services, and once these rules are effective, carriers that wish to continue filing tariffs under the permissive detariffing regime are free to modify such tariffs consistent with this Order. Carriers, including non-incumbent LECs, may remove the relevant portions of their tariffs for the affected services at any time during the transition. Once the transition ends, no price cap carrier may file or maintain any interstate tariffs for affected business data services.
- 49. Price cap incumbent LECs and competitive LECs may not file or maintain any interstate tariffs for affected business data services once the transition ends.¹⁶³ This will prevent carriers from obtaining "deemed lawful" status for tariff filings that are not accompanied by cost support and invoking the filed-rate doctrine in contractual disputes with customers.¹⁶⁴ Business data service providers will also be prevented from picking and choosing when they are able to invoke the protections of tariffs.¹⁶⁵
- 50. We do not intend our actions to disturb existing contractual or other long-term arrangements—a contract tariff remains a contract even if it is no longer tariffed. As we stated in the *BDS Order*, contract tariffs, term and volume discount plans, and individual circuit plans do not become void

¹⁵⁸ See id. at 3533-34, paras. 166-70.

¹⁵⁹ See id. at 3533, para. 166 (citing Hyperion Telecommunications, Inc. Petition Requesting Forbearance et al., Memorandum Opinion and Order and Notice of Proposed Rulemaking, 12 FCC Rcd 8596 (1997)).

¹⁶⁰ See Stay Order.

¹⁶¹ BDS Order, 32 FCC Rcd at 3533, para. 168.

¹⁶² Id. at 3533, para. 169.

¹⁶³ *Id*.

¹⁶⁴ Id. (citing AT&T Forbearance Order, 22 FCC Rcd at 18729, para. 42).

¹⁶⁵ See Further Notice, 31 FCC Rcd at 4866, para. 365.

upon detariffing. 166 All carriers are to act in good faith to develop solutions to ensure rates remain just and reasonable. 167

51. The rule amendments we adopt today relating to TDM transport are substantively the same as those the Commission adopted in the *BDS Order*, and as such, impose the same obligations on carriers as the existing rules. ¹⁶⁸ We make only minor clarifying changes to the rules. For example, we amend the rules to specify that competitive LECs must detariff their business data services by August 1, 2020. ¹⁶⁹

IV. FORBEARING FROM CERTAIN UNE DS1 AND DS3 TRANSPORT OBLIGATIONS (MEMORANDUM OPINION AND ORDER)

52. In the nearly fifteen years since the Commission last amended its UNE Transport rules, virtually all aspects of the communications marketplace have changed substantially. Informed by the record in this proceeding, our findings in the accompanying *BDS Remand Order*, ¹⁷⁰ and the Commission's prior undisturbed findings in the *BDS Order*, we forbear from certain UNE DS1/DS3 Transport obligations for price cap incumbent LECs. We find that partial forbearance is warranted in light of the increasingly competitive dedicated transport marketplace. Specifically, we forbear from continued application of the unbundling requirements of the Act and our rules for DS1/DS3 Transport along routes where competitive fiber is present within a half mile of each UNE-triggering endpoint (i.e., the Tier 2 or Tier 3 wire center that triggers the unbundling obligation)¹⁷¹—we find the presence of competitive fiber within a half mile creates a sufficiently dynamic marketplace to yield results that protect competition and consumers and further the public interest.¹⁷² We condition this forbearance on an appropriate transition

¹⁶⁶ See, e.g., Letter from John T. Nakahata, Counsel for Windstream, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143 et al., at 2-3 (observing the need to "preserve contractual expectations") (filed Apr. 11, 2017); Letter from James P. Young, Counsel for AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143 et al., at 17 (filed Apr. 13, 2017) ("ensure that existing terms and conditions not be abrogated as a result of detariffing").

¹⁶⁷ As the Commission stated in the *BDS Order*, there are a number of instances in which a contract tariff may reference a tariffed rate in order to calculate the contract rate for a particular service. In these circumstances, we believe there are a number of options for carriers to address this situation to continue to ensure the terms of the contract are upheld and rates continue to be just and reasonable. For example, incumbent LECs could publish the rates that would be used for the contract on its website, or in a published guidebook. The incumbent LEC and customer could also negotiate an addendum to the contract that would identify the actual rates for the particular services. *See BDS Order*, 32 FCC Rcd at 3534, para. 170 n.450.

¹⁶⁸ While the Eighth Circuit court reversed and remanded the Commission's previous TDM transport decision for insufficient notice, it temporarily stayed its mandate leaving the rules related to TDM transport services adopted in the *BDS Order* in effect. *See Stay Order*. Those rules will be replaced by the rules found in Appendix A of this Order.

¹⁶⁹ See Appendix A.

¹⁷⁰ For ease of reference herein, we refer to the accompanying Report and Order on Remand in Section III, *supra*, as the *BDS Remand Order*.

¹⁷¹ In other words, because our rules already only require UNE DS3 Transport to be made available on routes where at least one endpoint is a Tier 3 wire center, 47 CFR § 51.319(d)(2) (iii), the Tier 3 endpoint is the UNE-triggering endpoint (and both endpoints would be UNE-triggering for a route between two Tier 3 wire centers). In turn, our rules only require UNE DS1 Transport to be made available on routes where at least one endpoint is a Tier 2 or Tier 3 wire center, 47 CFR § 51.319(d)(2)(ii), hence the Tier 2 or Tier 3 endpoint is the UNE-triggering endpoint (or both endpoints for a route between two such endpoints).

¹⁷² We limit our forbearance relief herein *only* to price cap LEC wire centers as price cap LEC wire centers are the only wire centers included in the *2015 Collection* that formed the basis of the analysis in the *April Data Tables*. We have no record data regarding the proximity of competitive fiber to non-price cap LEC wire centers and therefore no data upon which to base a forbearance analysis. We note that USTelecom later filed a letter with the Commission (continued....)

period in light of the reasonable, investment-backed expectations of certain competitive LECs that currently rely on UNE DS1/DS3 Transport.

- 53. We start our analysis with the observation that UNE DS1/DS3 Transport shares the same marketplace dynamics as BDS TDM transport because both UNE DS1/DS3 Transport and BDS TDM transport involve locations having demand for the transport of aggregated traffic and are provided over the same price cap LEC local network facilities. UNE DS1/DS3 Transport links are merely segments of BDS TDM transport that aggregate competitive LEC traffic from wire centers serving their end user customers, just as incumbent LECs do for their own end user customers' traffic. ¹⁷³ This traffic aggregation and potential for increased traffic and revenue from additional end user customers affords competitive LECs a decreased risk of losing sunk costs should they self-deploy and subsequently experience a decrease in traffic. ¹⁷⁴ Because UNE DS1/DS3 Transport is functionally the same as its BDS segment counterpart, ¹⁷⁵ competitive LECs relying on UNE Transport are a type of BDS customer. In fact, competitive LECs often purchase BDS TDM transport service in lieu of UNE DS1/DS3 Transport when the latter is unavailable due to our current limitations on UNE Transport. ¹⁷⁶ Thus, facilities that serve as competitive alternatives to incumbent LEC BDS transport, including TDM transport, also serve as competitive alternatives to incumbent LEC UNE DS1/DS3 Transport. ¹⁷⁷
- 54. Accordingly, our findings in the *BDS Order* and *BDS Remand Order* largely apply to our analysis of the requested forbearance from UNE DS1/DS3 Transport obligations. Most notably, we reiterate that packet-based transport services are broadly substitutable for TDM-based transport services; that demand for TDM transport continues to decrease and demand for packet-based alternatives continues to increase; that the presence or reasonable proximity of even a single competitor's facilities represents competition given the high sunk cost nature of providing BDS; that more than a dozen separate transport providers compete in many markets; that, in 2013, 75.7% of price cap LEC wire center locations were within a half mile of competitive fiber (as confirmed by INCOMPAS's own analysis); that record submissions show that competition for BDS transport services has continued to grow; that cable's BDS revenues and share of BDS revenues have steadily increased; that traditional competitive LECs' BDS offerings have also increased; and that more generally there has been continued aggressive deployment by

¹⁷³ *Triennial Review Remand Order*, 20 FCC Rcd at 2577, para. 69; *Triennial Review Order*, 18 FCC Rcd at 17206-07, 17209, paras. 370, 373. *See also* INCOMPAS et al. Aug. 6, 2018 Opposition Attach. 4, Decl. of Douglas Denney at para. 7; *BDS Remand Order* at para. 32.

¹⁷⁴ See BDS Remand Order at para. 32; BDS Order, 32 FCC Rcd at 3515, para. 121; Triennial Review Remand Order, 20 FCC Rcd at 2579, para. 72.

¹⁷⁵ See, e.g., Verizon May 9, 2019 Comments at 7; CPUC Aug. 6, 2018 Comments at 20; INCOMPAS May 9, 2019 Comments at 18-19, Attach. 1, First Suppl. Decl. of Douglas Denney at para. 12; INCOMPAS et al. Aug. 6, 2018 Opposition Attach 5, Decl. of James Bellina at para. 12, Attach. 7, Decl. of Todd Matthew Way at para. 11.

¹⁷⁶ See, e.g., CPUC Aug. 6, 2018 Comments at 20; INCOMPAS May 9, 2019 Comments at 18-19, Attach. 1, First Suppl. Decl. of Douglas Denney at para. 12; INCOMPAS et al. Aug. 6, 2018 Opposition Attach. 5, Decl. of James Bellina at para. 12, Attach. 7, Decl. of Todd Matthew Way at para. 11.

¹⁷⁷ AT&T May 9, 2019 Comments at 6-7; Verizon May 9, 2019 Comments at 5-7. Opponents of forbearance do not appear to dispute this proposition. Rather, they dispute the likelihood that there are, as a practical matter, such alternatives due to pricing differentials between commercially available BDS transport and UNE DS1/DS3 Transport. *See*, *e.g.*, INCOMPAS May 9, 2019 Comments at 21-22.

competitors of BDS-capable network facilities since the *BDS Order*.¹⁷⁸ And consistent with the *BDS Order* and *BDS Remand Order*, we find that maintaining disparate regulatory treatment of carriers providing the same or similar services in a dynamic marketplace creates distortions in the marketplace that harm investment, competition, and consumers.¹⁷⁹ As Justice Breyer has noted, "mandatory unbundling comes at a cost, including disincentives to research and development by both [incumbent] []LECs, [competitive] []LECs and the tangled management inherent in shared use of a common resource."¹⁸⁰ Competition, and the public interest, is best served by removing what amounts to unnecessary competitive subsidies to particular carriers when either current or potential alternative sources of wholesale inputs are available to such competitors or retail competition already provides for just and reasonable incumbent LEC rates.

We nevertheless adopt a more conservative approach to evaluating competition in the 55. market for UNE DS1/DS3 Transport than we take in examining BDS transport. In the BDS Remand Order, we consider not only the proximity of alternative fiber to price cap LEC wire centers, but also the proximity of competitive fiber to locations with BDS demand and the percentage of BDS locations near those wire centers without nearby fiber. 181 We find that, based on the present record, competitive LECs have made a credible case that this second level of analysis cannot be imported wholesale to our analysis of UNE DS1/DS3 Transport. For example, competitive LECs note that they use UNE DS1/DS3 Transport from wire centers where they are collocated to reach end user customers served by incumbent LEC wire centers in which the competitive LEC has not collocated but where that competitive LEC needs access to unbundled loops from that wire center to serve its customers. In such cases, the incumbent LEC provides the competitive LEC an Enhanced Extended Loop (EEL)—the combination of an unbundled loop, multiplexing/concentrating equipment, and either DS1 or DS3 UNE Transport—that allows a competitive LEC to serve customers without deploying its own equipment or infrastructure in every wire center in an incumbent LECs' territory. 182 Competitive LECs credibly claim that they use EELs as well as UNE DS1/DS3 Transport to serve both BDS and non-BDS customers (such as residential end-users). 183 So while we can find that the vast majority of locations with BDS demand are either located within a wire center within a half mile of competitive fiber or were themselves within a half mile of competitive fiber

¹⁷⁸ See BDS Remand Order at paras. 16-34.

¹⁷⁹ See id. at para. 46.

¹⁸⁰ United States Telecom Ass'n v. FCC, 290 F.3d 415,429 (D.C. Cir. 2002) (citing Iowa Utils. Bd., 525 U.S. at 428 (Breyer, J., concurring in part and dissenting in part)).

¹⁸¹ BDS Remand Order at paras. 18-24.

¹⁸² UNE Remand Order, 15 FCC Red at 3707 (executive summary). EELs are only available to the extent the incumbent LEC is required to provide UNE Transport. *Triennial Review Remand Order*, 20 FCC Red at 2585, para. 85 (availability of EELs is dependent on the component UNEs). Should the DS1 or DS3 UNE Transport component of an EEL become unavailable because a wire center tier is subsequently upgraded due to additional collocators or business lines, the EEL becomes unavailable. *Id.* There are additional eligibility requirements for EELs not generally relevant here. *See* 47 CFR § 51.318; *UNE Remand Order*, 15 FCC Red at 17351-71, paras. 591-629. EELs not only carry TDM-based voice traffic, but often carry IP-based voice and data traffic. *See*, *e.g.*, INCOMPAS May 9, 2019 Comments Attach. 7, First Suppl. Decl. of R. Matthew Kohly at para. 10.

¹⁸³ See, e.g., INCOMPAS et al. Aug. 6, 2018 Opposition, at 12–20; Opposition of Sonic Telecom, LLC to Petition for Forbearance of USTelecom, WC Docket 18-141, at 18–22 (filed Aug. 6, 2018); INCOMPAS May 9, 2019 Comments Attach. 7, First Suppl. Decl. of R. Matthew Kohly at para. 7; First Communications June 6, 2019 Ex Parte Letter at 1-2; see generally Letter from John T. Nakahata and Henry Shi, Counsel for INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket. Nos. 18-141 et al. (filed June 3, 2019) (INCOMPAS June 3, 2019 Ex Parte Letter). TPx objects to any Commission UNE Transport forbearance analysis reliant upon TPx's previously-filed erroneous information. TPx April 15, 2019 Ex Parte Letter. Because such information relates to building locations having BDS demand, however, this data does not form the basis for our consideration of UNE DS1/DS3 Transport forbearance. TPx's objection is therefore moot for purposes of our UNE forbearance analysis.

relying on the number of locations with BDS demand in or near such wire centers, ¹⁸⁴ and that buildings with BDS demand that were served only by an incumbent LEC are on average only 364 feet from the closest competitive LEC fiber facility, ¹⁸⁵ we cannot take similar comfort that the non-BDS end users ultimately served by EELs and UNE DS1/DS3 Transport have similar competitive options across the nation based on the present record. ¹⁸⁶

- 56. Fortunately, the Commission has wide latitude in its approach to evaluating requests for forbearance and is not bound by any specific type of competition analysis when considering such requests. Indeed, the D.C. Circuit has held that section 10 "imposes no particular mode of market analysis or level of geographic rigor," instead "allow[ing] the forbearance analysis to vary depending on the circumstances." ¹⁸⁷
- 57. Accordingly, we proceed incrementally and limit our analysis to wire center endpoints where we know that actual or potential competition exists—i.e., those endpoints where competitive fiber is located within a half mile. In the *BDS Order*, the Commission concluded that one facilities-based competitor within a half mile of a location solely served by an incumbent LEC sufficiently restrains incumbent LEC pricing. The Commission also found that competition energized by its ordered deregulation would be more effective in delivering just and reasonable prices over the medium term than maintenance of pricing regulations. Because price cap LEC wire centers are effectively BDS locations for the competitive LECs needing transport from such wire centers, these competitive LECs would purchase BDS to meet their transport needs at that wire center but for the availability of UNE Transport. We therefore conclude that relying on the same approach as the *BDS Order* for evaluating actual or potential competition for UNE Transport at price cap LEC wire centers is appropriate.
- 58. Because these transport facilities are physically the same type of facilities, ¹⁹⁰ there is no rational basis to believe that it would take any longer to extend alternative fiber the final half mile to current UNE Transport aggregation points (wire centers) than it would to connect it to any other location with BDS transport demand or that the barriers to deployment would differ. Further, we find no basis to believe that the competitive pressure exerted on price cap LECs' rates for TDM transport at wire centers differ based on whether the purchaser is an enterprise customer, an interexchange carrier, or a competitive LEC seeking BDS TDM transport because it no longer can obtain UNE DS1/DS3 Transport. Consequently, we find that the presence of alternative fiber within a half mile of a price cap LEC wire center creates the same competitive marketplace dynamics for competitive LECs relying on UNE

¹⁸⁴ See BDS Remand Order at paras. 17, 20, 37.

¹⁸⁵ See id. at para. 16.

¹⁸⁶ To be clear, we recognize that alternative options for transport may well be similarly robust for non-BDS end users of UNE DS1/DS3 Transport, but we cannot make such a finding based on the present record.

¹⁸⁷ Earthlink v. FCC, 462 F.3d 1, 8 (D.C. Cir. 2006). The court also stated that it will "uphold the FCC's interpretation as long as it is reasonable, even if 'there may be other reasonable, or even more reasonable, views." *Id.* at 7 (citations omitted).

¹⁸⁸ BDS Order, 32 FCC Rcd at 3468, 3512-14, paras. 15, 118-119.

¹⁸⁹ *Id.* at 3512, para. 117.

¹⁹⁰ See, e.g., CPUC Aug. 6, 2018 Comments at 20; INCOMPAS May 9, 2019 Comments at 18-19, Attach. 1, First Suppl. Decl. of Douglas Denney at para. 12 (discussing result of forbearance); INCOMPAS et al. Aug. 6, 2018 Opposition Attach. 5, Decl. of James Bellina at para. 12, Attach. 7, Decl. of Todd Matthew Way at para. 11; CenturyLink May 9, 2019 Comments at 2; Verizon May 9, 2019 Comments at 17-18.

DS1/DS3 Transport as it creates for BDS TDM transport, ¹⁹¹ or any other location having DS1/DS3 level demand for a dedicated connection. ¹⁹²

- 59. Following forbearance, the availability of UNE DS1/DS3 Transport will continue to be determined on a wire center-to-wire center route basis by examining the classification of the wire center on each end of the desired transport route and determining whether the UNE-triggering wire center is sufficiently near competitive fiber. Along routes where the UNE-triggering endpoint has nearby competitive fiber, we expect market forces will work to ensure just and reasonable commercial interoffice transport prices in the absence of UNE DS1/DS3 Transport availability. Commercially available BDS transport from price cap LECs will be subject to the regulatory framework adopted in today's accompanying BDS Remand Order. We expect the good faith commercial solutions arising from that framework to work to ensure that BDS transport rates remain just and reasonable without resort to an ex ante regulatory process. 44 We estimate that there are roughly 11,000 Tier 2 and Tier 3 wire centers with nearby competitive fiber.
- 60. We condition this forbearance on an appropriate transition period. In the *BDS Order*, the Commission found that "a nearby potential business data services supplier, in the form of a wired communication network provider, generally tempers prices in the short term and results in reasonably competitive outcomes over three to five years (the medium term)." Accordingly, and in light of the need for an adequate transition to ensure that small businesses will have time to adjust to the new regulatory conditions, the Commission adopted a six-month freeze on BDS rates as well as a three-year transition period for mandatory detariffing. ¹⁹⁷ Here too small businesses claim the need for a reasonable transition period to reflect their reasonable, investment-backed expectations that they could rely on UNE DS1/DS3 Transport. Specifically, we are mindful of competitive LECs' concerns regarding the practical

 $^{^{191}}$ See BDS Remand Order at paras. 17-18, 21-25.

¹⁹² See id. at paras. 17, 23.

¹⁹³ We specifically grant this forbearance relief *without regard* to USTelecom's eleventh-hour alternative proposal to limit UNE Transport relief to "routes between wire centers that qualify as Tier 1 or Tier 2 wire centers under the Commission's unbundling rules." USTelecom May 6, 2019 *Ex Parte* Letter at 3. We are under no obligation pursuant to our "complete as filed" rules to consider such eleventh-hour alternatives and new data. *See 2015 USTelecom Forbearance Order*, 31 FCC Rcd at 6163, para. 8, n.35 (citing *Verizon v. FCC*, 770 F.3d 961, 968 (D.C. Cir. 2014)). To the extent our analysis of nearby fiber within a half mile yields similar results to USTelecom's alternative proposal, we clarify that our forbearance decision is based entirely on our analysis.

¹⁹⁴ BDS Remand Order at para. 41 (even where ex ante rate regulation is eliminated for BDS transport, sections 201, 202, and 208 of the Act will continue to apply).

¹⁹⁵ We direct the Bureau to release a list of Common Language Location Identification (CLLI) codes for the LERG-verified wire centers that have alternative fiber within a half mile based on the 2015 Collection on or before August 2, 2019. This CLLI code list will only identify wire centers that are no longer UNE-triggering and subject to forbearance based on the existence of nearby fiber. It will not include wire centers for which their status as a non-UNE-triggering wire center is dependent upon their tier classification contained in our rules, and is not static nor dependent upon our forbearance action here. See Letter from Patrick R. Halley, Senior Vice President, Advocacy and Regulatory Affairs, USTelecom to Marlene H. Dortch, Secretary, FCC, WC Docket. No. 18-141 (filed July 1, 2019) (USTelecom July 1, 2019 Ex Parte Letter). We decline, as suggested by Alaska Communications and USTelecom, to provide a process by which our list of wire centers with nearby fiber can be amended. Alaska Communications June 21, 2019 Ex Parte Letter at 3; USTelecom July 1, 2019 Ex Parte Letter at 7. We grant forbearance based only on the record at this time. We also decline to rely on the analysis performed by USTelecom that purports to include additional locations with nearby fiber due to our inability to replicate USTelecom's results using the 2015 Collection. See USTelecom May 6, 2019 Ex Parte Letter at 2.

¹⁹⁶ BDS Order, 32 FCC Rcd at 3467-68, paras. 13-15; *id.* at 3520, para. 132 (finding that a business location is competitive if a competitive provider's facilities are within a half mile).

¹⁹⁷ *Id.* at 3533, para. 167.

details of arranging for commercial interoffice transport alternatives. These competitive LECs may use competitive network providers that may not currently be providing interoffice transport capabilities today, but will move to meet this new demand from competitive LECs in the absence of rate-regulated UNE DS1/DS3 Transport. Competitive LECs transitioning from the availability of UNE DS1/DS3 Transport may also decide to deploy their own replacement fiber transport, while others may decide to rely on BDS transport from the price cap LECs, offerings currently in varying stages of detariffing and transition to commercial agreements.

As in the BDS Order, we adopt a six-month "freeze" of current market conditions alongside a three-year transition. Specifically, we adopt a six-month period from the effective date of this order in which new UNE DS1/DS3 Transport can be ordered. We find that such a timeframe will enable competitive LECs to execute short term business plans and fulfill contractual obligations they may already have to serve existing or new customers using UNE DS1/DS3 Transport.²⁰⁰ And we adopt a three-year transition period from the effective date of this order in which existing UNE DS1/DS3 Transport (including such UNE DS1/DS3 Transport ordered during the six-month transition period) must be grandfathered and maintained at regulated rates.²⁰¹ Although connecting nearby fiber located within a half mile of a wire center for any particular interoffice transport link is unlikely to take a full three years for any individual alternative transport link, we recognize that giving smaller competitive LECs a full three-year transition period to secure any alternative deployments to the extent needed is prudent based on the present record.²⁰² Notably, the three-year transition will expire almost five years from the effective date of the BDS Order.²⁰³ Therefore, we expect the transition period for UNE DS1/DS3 Transport to fully ensure that current and potential competition plays its expected role in working to ensure just and reasonable incumbent LEC rates for commercial BDS transport including TDM transport, which in turn ensures just and reasonable rates for consumers.

¹⁹⁸ See, e.g., INCOMPAS May 9, 2019 Comments at 8, 10, 11, Attach. 1, First Suppl. Decl. of James Bellina at para. 7, Attach. 6, First Suppl. Decl. of Dan Bubb at para. 4, Attach. 7, First Suppl. Decl. of R. Matthew Kohly at para. 15.

¹⁹⁹ INCOMPAS May 9, 2019 Comments at 10, 14, 22.

²⁰⁰ See First Communications June 6, 2019 Ex Parte Letter at 3 (explaining "[t]he ability to order new transport UNEs is necessary because existing customers' bandwidth needs may increase, and competitive LECs need to be able to respond to customer bandwidth and other demands in order to remain competitive"); see also id. (asserting "competitive LECs may need time to increase their customer base to justify alternative transport construction or purchases").

²⁰¹ Such rates are established either through negotiated interconnection agreements or through State-Commission-arbitrated rates applying certain Commission-developed pricing formulas. *See* 47 U.S.C. §§ 251, 252; 47 CFR § 51.501 *et seq*. Our forbearance is not intended to upset pre-existing interconnection agreements or other contractual arrangements that may currently exist nor pre-existing State-Commission-arbitrated rates during the transition period, which should quell concerns of those fearing near-term price increases for UNE DS1/DS3 Transport, or impact to any contractual rights to move, add, or change leased circuits not affected by any contractual change of law provisions. *See Triennial Review Remand Order*, 20 FCC Rcd 2613-14, para. 145; *see also* TEXALTEL Sept. 5, 2018 Reply at 9-10; Opposition of TPx, WC Docket No. 18-141, at 27 (filed Aug. 6, 2018) (asserting their concerns about UNE rate increases); USTelecom June 21, 2018 *Ex Parte* Letter at 1 (proposing no price increase on UNEs only until February 4, 2021). *See also* INCOMPAS June 28, 2019 *Ex Parte* Letter at 2. Of course, the transition mechanism we adopt is simply a default process, and competitive LECs and price cap LECs remain free to negotiate different arrangements superseding this transition period and replacing UNE DS1/DS3 Transport arrangements with negotiated commercial arrangements at any earlier time.

²⁰² INCOMPAS et al. Aug. 6, 2018 Opposition at 56-57.

²⁰³ The *BDS Order* was published in the Federal Register on June 21, 2017, making August 1, 2017, the detariffing transition start date. *See BDS Order*, 32 FCC Red at 3533, para. 167 (noting that "[t]he transition will begin on the effective date of this Order (sixty (60) days after Federal Register publication)").

- 62. In short, competition will more effectively ensure just and reasonable prices for transport and the end-user services provided via transport than maintenance of these UNE obligations. For the foregoing reasons, we find that enforcing UNE DS1/DS3 Transport obligations where we have evidence of nearby fiber is not necessary after a transition period to ensure that price cap LECs' transport charges, practices, and classifications are just and reasonable and not unjustly or unreasonably discriminatory. For the same reasons, we find that competition in these areas (and along these routes) will better ensure that consumers are protected than the UNE DS1/DS3 Transport obligations.²⁰⁴ We thus find that the forbearance granted herein satisfies section 10(a)(1) and 10(a)(2) of the Act.
- 63. We also find that the forbearance granted herein is in the public interest—the remaining section 10 criterion.²⁰⁵ Because disparate treatment of similarly situated competitors creates marketplace distortions that may harm consumers,²⁰⁶ removing unneeded UNE DS1/DS3 Transport obligations will eliminate such distortions and thereby foster competitive conditions, enhancing competition among providers of telecommunications services. Moreover, we find that forbearance will facilitate additional deployment of next-generation networks. In particular, we expect that nearby fiber providers within a half mile of incumbent LEC wire centers where competitive LECs demand interoffice transport will deploy fiber and offer different transport routes over their fiber networks that meet the transport needs of competitive LECs that can no longer rely on UNE DS1/DS3 Transport.²⁰⁷ This additional fiber deployment will enable the competitive provision of more advanced services, particularly using packet-based technology, and enhance the transition away from legacy networks and services to IP-based networks and services²⁰⁸—a transition that is impeded by the continued availability of legacy network facilities at below-market rates based on decades-old unbundling requirements.²⁰⁹
- 64. We disagree with several arguments in the record regarding the appropriate forbearance analysis. For example, USTelecom and several incumbent LECs claim that the rationale used to provide nationwide *ex ante* pricing and tariffing forbearance relief for BDS transport should be applied identically

²⁰⁴ 47 U.S.C. § 160(a)(1), (2); see 2019 USTelecom 271/272 Forbearance Order at 16, n.110 (focusing discussion on whether forbearance will ensure just and reasonable rates and charges given that no party has advanced a theory under which incumbent LECs could engage in unreasonable practices and classifications without also being able to charge unjust and unreasonable rates).

²⁰⁵ Section 10(b) directs the Commission to consider whether forbearance "will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services," and provides that such a determination may be the basis for finding that forbearance is in the public interest. 47 U.S.C. § 160(b).

²⁰⁶ See BDS Remand Order at para. 46.

²⁰⁷ We thus disagree with commenters that suggest that any forbearance here is not in the public interest and may lead to a lessening of competitive fiber deployment. *See*, *e.g.*, INCOMPAS Aug. 6, 2018 Opposition at 11; Public Knowledge Aug. 6, 2018 Opposition at 22-24; INCOMPAS May 9, 2019 Comments at 24. The forbearance we adopt instead is precisely targeted to those situations in which the deployment of competitive fiber is most likely.

²⁰⁸ Thus, we find that exercising our forbearance authority in this manner follows the exhortation of Section 706 of the Telecommunications Act to "utiliz[e]" forbearance to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans," 47 U.S.C. § 1302(a), and we find that the future benefits of our action outweigh any short term impact (which should in turn be mitigated substantially by the scope and conditions tied to our grant of forbearance). *See EarthLink v. FCC*, 462 F.3d at 8-9.

²⁰⁹ See BDS Order, 32 FCC Rcd at 3582-83, para. 288 (finding that the obligation that incumbent LECs must provide wholesale access in certain circumstances had negative effect on the "deployment of, and transition to, next-generation network infrastructure and innovative IP services"); Petition, Appx. B at 3 ("If forbearance were granted to the ILECs that are currently obligated to sell UNEs at below market rates, customer migration to next-generation services would accelerate").

for purposes of granting nationwide UNE DS1/DS3 Transport forbearance relief.²¹⁰ We disagree.²¹¹ Because we cannot confirm that non-BDS customers that currently rely (indirectly) on UNE DS1/DS3 Transport have similar competitive options as BDS customers do, we cannot take the same comfort that such customers will be protected on the present record. Accordingly, we deny forbearance relief for UNE DS1/DS3 Transport for those price cap LEC wire centers where the record does not demonstrate that there is nearby fiber.²¹²

- 65. We also reject USTelecom's claim that cable HFC networks serve as a second *ubiquitous* transport network that supports UNE Transport forbearance.²¹³ The extent to which cable networks, like other fiber networks, exist as an alternative to the incumbent LEC interoffice transport network is reflected in our analysis of where there is alternative fiber within a half mile of an incumbent LEC wire center.²¹⁴ Or to frame it another way—we can agree with USTelecom only to the extent that the record demonstrates that such networks are in fact ubiquitous, and elsewhere we must follow the record, not USTelecom's assertions to the contrary.
- 66. We reject opponents' suggestions that fiber owned by various nearby fiber providers should not be treated as a competitive alternative for UNE DS1/DS3 Transport.²¹⁵ These opponents argue that other fiber providers, generally, are uninterested in providing competitive DS1/DS3 service and that cable providers, in particular, are either ill-suited or unwilling to provide such service due to the unique characteristics of their networks.²¹⁶ But these commenters rely on outdated assumptions more than 15

²¹⁰ See, e.g., Petition at 28-29; USTelecom May 6, 2019 Ex Parte Letter at 8-11; AT&T May 9, 2019 Comments at 5-8; CenturyLink May 9, 2019 Comments at 9-10; USTelecom May 28, 2019 Reply at 2-3; Verizon May 28, 2019 Reply at 2-3; cf., e.g., INCOMPAS May 9, 2019 Comments at 6-8.

²¹¹ That is, we do not provide the nationwide relief that USTelecom seeks. Petition at 24-25; USTelecom May 6, 2019 Ex Parte Letter at 1.

²¹² Although incumbent LECs assert that UNE DS1/DS3 Transport is used in areas that the Commission already considers competitive for BDS purposes, *see*, *e.g.*, Verizon May 9, 2019 Comments at 13, they do not assert that this is exclusively the case. Further, there is evidence in the record to the contrary. *See*, *e.g.*, INCOMPAS May 9, 2019 Comments at 20-21, Attach. 4, First Suppl. Decl. of Jeffrey Buckingham at paras. 3-4, Attach. 7, First Suppl. Decl. of R. Matthew Kohly at paras. 5-6. In any case, a rulemaking would be a more appropriate proceeding to gather additional comment and evidence to make such findings.

²¹³ USTelecom May 6, 2019 Ex Parte Letter at 4.

²¹⁴ This is not to say that a competitive cable HFC network capable of serving the same customer locations as the competitive LEC could not at some future time provide sufficient competition to warrant forbearance from UNE Transport or other UNE obligations in any particular geographic service area when such information and data has been properly made available in the record.

²¹⁵ See, e.g., INCOMPAS May 9, 2019 Comments at 3-4, 8, 20-21; TPx May 28, 2019 Reply at 5; Letter from Tamar E. Finn and Patricia Cave, Counsel to First Communications, LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 18-141 et al., at 2 (filed June 6, 2019) (First Communications June 6, 2019 Ex Parte Letter). We are also unpersuaded by TPx's argument that past Commission reference to UNE-based competition serves as a reason not to grant forbearance. Letter from Tamar E. Finn and Patricia Cave, Morgan Lewis & Bockius LLP, Counsel for U.S. TelePacific Corp. et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed July 2, 2019). With regard to BDS, we note that the Commission explicitly rejected considering in its analysis any role that UNEs played in the BDS marketplace. BDS Order, 32 FCC Rcd at 3476, paras. 32-34; id. at 3520, para. 132 n.401. Further, so long as there are, in fact, alternatives to UNE DS1/DS3 transport (which there are where we are granting forbearance), the lack of such an unbundling obligation should not undercut any prior Commission determinations.

²¹⁶ INCOMPAS May 9, 2019 Comments at 3-4, 8-10, 22; Sonic May 9, 2019 Comments at 4-5; INCOMPAS May 28, 2019 Reply at 15; TPx May 28, 2019 Reply at 5. Even if these cable companies were ultimately unwilling to provide competitive LECs with transport, we find that the existence of such networks, which are used to serve end users in the same general vicinity, is likely sufficient to temper price increases in the short term and result in reasonably competitive outcomes in the medium term, ensuring just and reasonable rates for consumers.

years old²¹⁷ and ignore more recent, directly relevant, precedent and record evidence reflecting the continued aggressive deployment of competitive fiber since 2013, and particularly the increased competition for BDS Transport, including from cable competitors, over the past six years.²¹⁸ Indeed, the Commission has found in the context of DS1 and DS3 BDS TDM transport, that alternative fiber providers do, in fact, serve as potential providers that will seek to monetize their investments on a wholesale basis.²¹⁹

- We are also unpersuaded by arguments that the same alternative fiber provider must 67. serve both ends of a UNE DS1/DS3 Transport route for such route to be subject to forbearance.²²⁰ The Commission has previously considered and rejected this argument, and it is even more unconvincing today due to the myriad of opportunities to alternatively route traffic using pre-existing or new options.²²¹ The Commission has explicitly rejected such an analysis in the past because it fails to acknowledge that the same transport provider is likely to be operating in multiple nearby wire centers, fails to take into account potential deployment, and is administratively unworkable.²²² Not only does the presence of an initial alternative fiber provider that has overcome any existing barriers to entry indicate the potential for more such providers to enter the market (creating the possibility of a direct route being supplied by the same provider), but indirect routing is much more likely when competitive LECs and multiple alternative fiber providers interconnect at locations such as neutral carrier hotels.²²³ To the extent that forbearance encourages such alternative routing, avoiding unnecessary duplication of incumbent LEC network topology, it furthers the public interest by creating more resilient, geographically-diverse routing. We also note that competitive LECs have indicated that they have their own physical network presence frequently in several, if not dozens or hundreds, of incumbent LEC wire centers.²²⁴ This creates an enormous number of routing permutations using the various alternative fiber providers in the area, should the same provider not serve all necessary wire centers.
- 68. Similarly, we reject arguments suggesting that our nearby fiber analysis fails to consider the availability of splice points along such fiber routes.²²⁵ The record demonstrates that any current lack of fiber splice points for connecting alternative fiber, to the extent that this situation does, in fact, exist, is not a meaningful barrier to actual use of such fiber as a replacement for UNE DS1/DS3 Transport. No party has rebutted either the observation made by one of the largest fiber providers in the country, CenturyLink, that such circumstances do not affect deployment decisions or the explanation that

²¹⁷ See, e.g., INCOMPAS May 9, 2019 Comments at 3-4, 8-10, 22 (relying on Commission findings from 2004).

²¹⁸ See BDS Remand Order at paras. 28-31 (discussing the Atlantic-ACM 2018-2023 Forecast). INCOMPAS raises the concern that there have been incumbent LEC acquisitions of competitive fiber providers since 2013, and observes that it is not clear how this was categorized in the April Data Tables. INCOMPAS June 28, 2019 Ex Parte Letter at 1. We confirm that no wire centers that are no longer UNE-triggering wire centers based on the April Data Tables analysis show Level 3 or XO as the sole alternative fiber providers to CenturyLink or Verizon, respectively.

²¹⁹ See id. at para. 17; see also id. at 18-19 (discussing measures of competition).

²²⁰ See INCOMPAS May 28, 2019 Reply at 14-15.

²²¹ See, e.g., INCOMPAS et al. Aug. 6, 2018 Opposition, Attach. 6, Decl. of Jeff Buckingham at para. 10, Attach. 12, Decl. of Jeff Rhoden at para. 5, Attach. 15, Decl. of R. Matthew Kohly at para. 9; WorldNet Aug. 6, 2018 Comments at 1 n.1; TPx Aug. 6, 2018 Opposition at 5.

²²² See Triennial Review Remand Order, 20 FCC Rcd at 2590-91, paras. 97-98.

²²³ See, e.g., USTelecom May 28, 2019 Reply at 11.

²²⁴ See, e.g., INCOMPAS et al. Aug. 6, 2018 Opposition, Attach. 6, Decl. of Jeff Buckingham at para. 10, Attach. 12, Decl. of Jeff Rhoden at para. 5, Attach. 15, Decl. of R. Matthew Kohly at para. 9; WorldNet Aug. 6, 2018 Comments at 1 n.1; TPx Aug. 6, 2018 Opposition at 5.

²²⁵ See, e.g., INCOMPAS May 9, 2019 Comments at 8-10.

fundamental economics and engineering best practices dictate including splice points at regular intervals in fiber networks. 226

- 69. We are also unpersuaded by opponents' arguments that UNE DS1 Transport requires any special treatment.²²⁷ The record strongly supports a conclusion that a substantial amount of UNE DS1/DS3 Transport is used in the provision of EELs, including for IP-based services. Because EELs combine unbundled loops and UNE Transport so the competitive LEC can serve its end-user customers, such UNE Transport component of an EEL is directly related to end users' needs. As end users' needs continue to grow,²²⁸ so will the required transport bandwidth needs grow.
- USTelecom needed to make its case pursuant to the market-power standard of the *Qwest Phoenix Order*.²²⁹ For one, INCOMPAS fails to recognize that the *Qwest Phoenix Order* expressly acknowledged that "a different analysis may apply when the Commission addresses advanced services, like broadband services." Indeed, the Commission there agreed with the D.C. Circuit that "[o]n its face' section 10 'imposes no particular mode of market analysis or level of geographic rigor,' but rather 'allow[s] the forbearance analysis to vary depending on the circumstances." Accordingly, the alleged requirement to follow the market-power standard of the *Qwest Phoenix Order* simply does not exist. For another, the Commission explicitly declined to apply the market-power standard of the *Qwest Phoenix Order* and the antitrust principles of the DOJ/FTC merger guidelines when considering its approach to evaluating competition in the *BDS Order*. And in the appeal of *BDS Order*, the Eighth Circuit affirmed this approach as well as the half mile standard that we rely upon here.
- 71. Moreover, we disagree with several alternative proposals and arguments in the record regarding the appropriate transition period on which to condition forbearance. While USTelecom recognizes the need for some transition period, it proposes a duration of only 18 months.²³⁵ For the

²²⁶ CenturyLink Feb. 19, 2016 Reply at 30; AT&T Sept. 23, 2016 *Ex Parte* Letter at 3 ("[A]s AT&T and others have documented, when providers deploy a BDS network in an area, basic economics and best engineering practices dictate the simple step of including splice points at regular intervals to ensure that the network is capable of serving existing and potential BDS demand in that area").

²²⁷ See INCOMPAS May 9, 2019 Comments at 20-21.

²²⁸ See, e.g., BDS Order, 32 FCC Rcd at 3482, para, 44; id. at 3485, para, 56.

²²⁹ See INCOMPAS Motion for Summary Denial (Aug. 6, 2018); Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area, Memorandum Opinion and Order, 25 FCC Rcd 8622 (2010) (Qwest Phoenix Order).

²³⁰ Owest Phoenix Order, 25 FCC Rcd at 8644, para. 39.

²³¹ *Id.* at 8645, para. 41 (quoting *EarthLink v. FCC*, 462 F.3d at 8).

²³² For this reason, we need not address here arguments that the *Qwest Phoenix Order* took an unduly narrow view of competition, unreasonably excluded competitors, or otherwise was wrongly decided. Nor need we opine on whether the assumption in the *Qwest Phoenix Order*—that it is the incumbent LEC's burden to prove that it does not have market power rather than an opposing party's burden to prove that an incumbent LEC does have market power—comports with the pro-competitive and deregulatory thrust of the Telecommunications Act or the rapid evolution of the communications market to a plethora of service offerings using a variety of non-traditional technologies.

²³³ BDS Order, 32 FCC Rcd at 3515-16, paras. 121-24.

²³⁴ BDS Order, 32 FCC Rcd at 3467, para. 12; Citizens Telecomms. v. FCC, 901 F.3d at 1007-08.

²³⁵ USTelecom proposes grandfathering currently-provided UNEs until February 4, 2021 at current rates, but with no new orders being accepted. *See* Letter from Jonathan Banks, Senior Vice President, Law & Policy, USTelecom, et al., to Marlene H. Dortch, Secretary, FCC, WC Docket. No. 18-141 (filed June 21, 2018) (USTelecom June 21, 2018 *Ex Parte* Letter); *see also* Letter from Patrick R. Halley, Senior Vice President, Advocacy and Regulatory (continued....)

reasons explained above, we find that such a transition period is insufficient to ensure that rates are just and reasonable and end-user customers are not harmed once forbearance relief becomes effective.²³⁶ And we find that the three-year transition period, including the six-month period in which UNE DS1/DS3 Transport can continue to be ordered, adequately addresses INCOMPAS' argument that USTelecom's proposed transition period would disrupt service to consumers because it is too short and does not allow for any new UNE orders.²³⁷

- 72. At the same time, we reject commenter proposals to permit a longer transition than the one we adopt today.²³⁸ For example, one commenter proposes that we establish a transition that would create mandatory "off ramps" for already-purchased UNEs of between seven years and 12 years, but coupled with the ability of competitive LECs to indefinitely retain a certain number of those UNEs regardless of the availability of existing or potential nearby facilities-based alternatives.²³⁹ Others suggest timeframes of seven years with a five-year period for additional new orders "to moderate the adverse impact on customers and give carriers sufficient time to adjust to the change while still furthering the goal of promoting IP networks" or longer transition periods for rural areas due to allegedly lower demand.²⁴⁰ We are not convinced that a longer transition timeframe is necessary for UNE Transport forbearance in light of the existence of the nearby fiber facilities that form the basis for our forbearance relief and the lack of evidence that, on balance, barriers to entry in the provision of transport in price cap LEC rural areas are higher than in non-rural areas.
- 73. Further, we address WorldNet's arguments that forbearance should be denied or subject to an extended transition period in Puerto Rico because of the state of the economy there, the effects of Hurricane Maria, and differences in the level of competition in the communications marketplace in Puerto Rico versus other parts of the country.²⁴¹ WorldNet asserts that forbearance will lead to significant

²³⁶ We also disagree with USTelecom that the six-month period for placing new orders is unjustified because it has not been applied in previous forbearance orders. USTelecom July 1, 2019 Ex Parte Letter at 2-3. The two instances cited by USTelecom pertained to limited geographic markets (the Omaha Metropolitan Statistical Area and the Alaska Communications Anchorage, Alaska study area, respectively). Id.; Qwest Omaha Forbearance Order, 20 FCC Rcd at 19417, para. 2; Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as Amended (47 U.S.C. §160(c)), for Forbearance from Certain Dominant Carrier Regulation of Its Interstate Access Services, and for Forbearance from Title II Regulation of Its Broadband Services, in the Anchorage, Alaska, Incumbent Local Exchange Carrier Study Area, Memorandum Opinion and Order, 22 FCC Rcd 1958, 1959, para. 1 (2007) (ACS Forbearance Order). Moreover, USTelecom's reliance on the Triennial Review Remand Order transition period is inapposite as the elimination of UNE obligations was based on the impairment standard under section 251(d)(2) rather than a forbearance standard. ACS Forbearance Order, 22 FCC Rcd 1961, para. 5, n.13 ("In a forbearance proceeding, Congress has charged the Commission with determining whether the standards of section 10(a) are satisfied; those standards are not identical to the standards of section 251(d)(2).").

²³⁷ See INCOMPAS Aug. 6, 2018 Opposition at 56-57; see also Comments of WorldNet Aug. 6, 2018 Comments at 18. (arguing that USTelecom's proposed transition period is too short); Letter from John T. Nakahata and Mengyu Huang, Counsel for INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket. Nos. 18-141 et al. at 1-5 (filed July 3, 2019) (INCOMPAS July 3, 2019 Ex Parte Letter).

²³⁸ See Uniti Fiber Sept. 5, 2018 Reply at 6-9; First Communications June 6, 2019 Ex Parte Letter at 2-3.

²³⁹ See Uniti Fiber Sept. 5, 2018 Reply at 6-9.

²⁴⁰ See First Communications June 6, 2019 Ex Parte Letter at 3; INCOMPAS June 28, 2019 Ex Parte Letter at 2; see also TPx June 13, 2019 Ex Parte Letter.

²⁴¹ See WorldNet Comments at 2-4, 10, 17. See also Letter from Sandra Torres López, President, Puerto Rico Telecommunications Bureau to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed Feb. 12, 2019); Letter from Richard Davis, Counsel for WorldNet Telecommunications, Inc., to Marlene H. Dortch, Secretary, FCC, (continued....)

market disruption, stranded investment, and increased prices for customers at a time when residents of Puerto Rico are already incurring financial hardship from the effects of the hurricane and that forbearance should therefore be denied.²⁴² The forbearance relief we grant today is limited to only those price cap LEC wire centers where the record demonstrates that there is actual or potential competition. And importantly, we provide a transition period to reflect the reasonable, investment-backed expectations of competitive LECs such as WorldNet; to enable such competitors to arrange for commercial transport alternatives; and to allow market forces to work to ensure that rates for transport, and rates for end-user services provided via transport, remain just and reasonable. Therefore, we do not find it necessary to exclude Puerto Rico entirely from the scope of the forbearance granted herein.

- 74. However, we conclude that we should adopt a somewhat longer transition period for wire centers subject to forbearance in Puerto Rico, and we therefore provide a five-year, rather than three-year, grandfathering period for such wire centers. We agree with commenters that the state of the economy in Puerto Rico and the ongoing restoration efforts there resulting from the devastating effects of Hurricanes Maria and Irma are special circumstances that warrant different treatment from the mainland.²⁴³ Indeed, the Commission noted in creating the Uniendo a Puerto Rico Fund that "[r]ecovery of the communications networks in Puerto Rico . . . has proven especially challenging, particularly compared to other locations in the United States impacted by [the 2017] season's hurricanes."²⁴⁴ Our selection of three years for the general grandfathering period for the rest of the United States is premised on, among other things, this order being adopted roughly two years into the three-to-five-year medium term that the Commission envisioned in the *BDS Order*. In those same two years, however, carriers in Puerto Rico have clearly and justifiably been focused on recovery efforts, forestalling any market adaptations to the *BDS Order*. In light of this, it is reasonable to view the "medium-term" adaptation for wire centers in Puerto Rico as beginning with the adoption of this order and to provide for a five-year grandfathering period for wire centers in Puerto Rico.²⁴⁵
- 75. Finally, we reject arguments that commenters have had insufficient opportunity to participate in this proceeding under the Commission's rules, including the Commission's forbearance procedures. We find that the comment and reply period, the extended access period to the data enclave, and the ability of interested parties to provide further comments in *ex parte* submissions considered up until the beginning of the Sunshine period have afforded all interested parties, including INCOMPAS and its members, sufficient opportunity to participate. Additionally, the need to act in this proceeding by the

²⁴² See WorldNet Comments at 8. Puerto Rico Telephone Company disagrees with these arguments. See Letter from Eduardo R. Guzman and Matthew G. Baker, Counsel for Puerto Rico Telephone Company, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed July 2, 2019).

²⁴³ See WorldNet Comments at 2-4, 10, 17; Liberty Cablevision of Puerto Rico LL Comments at 3-4, 15-16; see also Letter from Sandra Torres López, Pres., Puerto Rico Telecommunications Bureau, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed Feb. 12, 2019); Telecommunications Regulatory Board of Puerto Rico Reply at 4; Letter from Richard Davis, Counsel for WorldNet Telecommunications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed June 24, 2019); Letter from Richard Davis, Counsel for WorldNet Telecommunications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed June 25, 2019).

²⁴⁴ The Uniendo a Puerto Rico Fund and the Connect USVI Fund et al., Order and Notice of Proposed Rulemaking, 33 FCC Rcd 5404-05, para. 1 (2018) (Uniendo PR and Connect USVI Funds Order and NPRM).

²⁴⁵ We need not similarly extend the transition for the U.S. Virgin Islands, which are also the subject of the *Uniendo PR and Connect USVI Funds Order and NPRM*, for the relief that we grant today because there are no wire centers in the U.S. Virgin Islands with nearby fiber in the territory.

²⁴⁶ See, e.g., INCOMPAS May 9, 2019 Comments at 14-18.

statutory deadline of August 2, 2019, to avoid having USTelecom's Petition "deemed granted," is a further relevant factor in reaching this conclusion.²⁴⁷

- Opponents' claims that USTelecom's Forbearance Petition was incomplete as filed, thus allegedly violating section 1.54 of our rules, also fail.²⁴⁸ The Commission has defined "complete as filed" to mean that a forbearance petition must explicitly state the scope of the relief requested, address each prong of the statute as it applies to the rules or provisions from which the petitioner seeks relief, identify any other proceedings pending before the Commission where the petitioner speaks to the relevant issues, and comply with format requirements.²⁴⁹ USTelecom's Petition on its face satisfies these criteria for the three categories of rules addressed in the Petition. Under the standard apparently proposed by INCOMPAS, any Petition that is ultimately denied in part or in whole would have been incomplete as filed because it had not made a sufficient case for relief. Further, with regard to the highly confidential and confidential data that USTelecom submitted shortly after filing its Petition and once the Bureau released a Protective Order, the Bureau granted an extension of the comment and reply comment deadlines on USTelecom's Petition in light of the delay in submitting this evidence and data upon which the Petition relied into the record. 250 And, with regard to the incorporation of the 2015 Collection into the record of USTelecom Forbearance Petition proceeding—which was not necessary for USTelecom to make a prima facie case, and was done on the Bureau's own motion—parties were aware of the potential relevance of such data from the Petition. Indeed, INCOMPAS cited such data in its opposition to the Petition.²⁵¹
- 77. We also disagree with commenters alleging that they have had insufficient time or inadequate opportunity to comment on the 2015 Collection; related staff analyses, including the April Data Tables; and the BDS comments and replies included in the record of the USTelecom Forbearance Petition proceeding.²⁵² In particular, the Bureau's May 14, 2019 Public Notice²⁵³ addressed the concerns expressed by INCOMPAS in this regard. In response to INCOMPAS' Motion for Extension of Time to File Reply Comments.²⁵⁴ the Bureau extended the date for filing reply comments from May 16, 2019, to

²⁴⁷ 47 U.S.C. § 160(c). We also note that INCOMPAS's actual opportunity to prepare initial comments addressing the material added to the record in the USTelecom Forbearance Petition proceeding in April 2019 was greater than would appear based solely on the formal comment period of 15 days from publication of the request for further comment in the Federal Register on April 25, 2019. *See generally April 15, 2019 Public Notice*. INCOMPAS had actual notice that the *2015 Collection* was being added to the record in the USTelecom Forbearance Petition proceeding on or shortly after April 3, when the Commission released a Public Notice to this effect. *See generally April 3, 2019 Public Notice*. In fact, INCOMPAS objected to incorporation of the BDS data in a filing with the Commission on April 15, 2019. *See* Letter from John T. Nakahata, Counsel for INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket. Nos. 18-141 et al. (filed Apr. 15, 2019).

²⁴⁸ See, e.g., Motion to Dismiss of INCOMPAS, WC Docket No. 18-141 (filed May 11, 2018); INCOMPAS et al. Aug. 6, 2018 Opposition at 64-65; Public Knowledge May 11, 2018 Opposition at 1; INCOMPAS et al. Sept. 5, 2018 Reply at 8; INCOMPAS March 13, 2019 Ex Parte Letter; INCOMPAS May 9, 2019 Comments at 16-18; Sonic May 9, 2019 Comments at 2-3.

²⁴⁹ Petition to Establish Procedural Requirements to Govern Proceedings For Forbearance Under Section 10 of the Communications Act of 1934, as Amended, Report and Order, 24 FCC Rcd 9543, 9553-54, paras. 16-19 (2009).

²⁵⁰ See Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. §160(c) to Accelerate Investment in Broadband and Next-Generation Networks, Order, 33 FCC Rcd 5287 (WCB 2018).

²⁵¹ INCOMPAS Opposition at 2-3, 29 n.102.

²⁵² INCOMPAS May 9, 2019 Comments at 2-4, 14-18.

²⁵³ See generally May 14, 2019 Public Notice.

²⁵⁴ Subsequent to INCOMPAS's May 9, 2019 Comments, it filed a request for the original reply date of May 16, 2019 to be extended to May 28, 2019, *see* INCOMPAS, Motion for Extension of Time, WC Docket Nos. 18-141 et al., (filed May 13, 2019), which the Bureau granted. *See generally May 14, 2019 Public Notice*.

May 28, 2019. The Bureau also "extend[ed] access to the Secure Data Enclave until June 30, 2019, to allow interested parties additional time to access the data and supplement the record with further analysis of the data in their reply comments or pursuant to our *ex parte* rules."²⁵⁵ These steps significantly address any concerns INCOMPAS might have had regarding the ability of its members to access and analyze the data. Indeed, INCOMPAS commented on the *April Data Tables* on which our forbearance analysis is based during the extended reply comment period provided by the Bureau and in a subsequent filing²⁵⁶ (and we reject those arguments for the reasons discussed herein).

V. PROCEDURAL MATTERS

- 78. Paperwork Reduction Act Analysis—This document does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4).
- 79. Congressional Review Act—The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act.²⁵⁷
- 80. Final Regulatory Flexibility Analysis—As required by the Regulatory Flexibility Act (RFA),²⁵⁸ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the Second Further Notice.²⁵⁹ The Commission sought written public comment on the possible significant economic impact on small entities regarding the proposals addressed in the Second Further Notice, including comments on the IRFA. Pursuant to the RFA, a Final Regulatory Flexibility Analysis is set forth in Appendix B.

VI. ORDERING CLAUSES

- 81. ACCORDINGLY, IT IS ORDERED that, pursuant to sections 1, 2, 4(i)–(j), 10, 201(b), 202(a), 403, of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151, 152, 154(i)–(j), 160, 201(b), 202(a), 403, 1302, this Report and Order on Remand in WC Docket No. 16-143, GN Docket No. 13-5, WC Docket No. 05-25, and RM-10593 IS ADOPTED and SHALL BE EFFECTIVE thirty (30) days after publication in the Federal Register.
- 82. IT IS FURTHER ORDERED that Parts 61 and 69 of the Commission's rules, 47 CFR Parts 61 and 69, ARE AMENDED as set forth in Appendix A, and that such rule amendments SHALL BE EFFECTIVE thirty (30) days after publication of this Report and Order on Remand in the Federal Register.
- 83. IT IS FURTHER ORDERED that, pursuant to sections 402 and 405 of the Communications Act, 47 U.S.C. §§ 402, 405, the date of "public notice" with respect to this Report and Order on Remand of all actions taken herein shall be the date that a summary of this Report and Order on Remand is published in the Federal Register. The period for filing petitions for reconsideration or petitions for judicial review of all actions taken herein shall commence on that date. Section 1.4 of the Commission's rules, 47 CFR § 1.4, is hereby waived to the extent inconsistent with this paragraph.

²⁵⁵ May 14, 2019 Public Notice at 3.

²⁵⁶ See INCOMPAS May 28, 2019 Reply at 11 (arguing that "the April Data Tables show" insufficient competition to justify forbearance); Letter from John Nakahata, Counsel for INCOMPAS, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed June 14, 2019) (arguing that "the record evidence—including the April Data Tables—fails to support nationwide forbearance from transport UNEs").

²⁵⁷ See 5 U.S.C. § 801(a)(1)(A).

²⁵⁸ See id. § 603.

²⁵⁹ Second Further Notice, 33 FCC Rcd at 10480-90, Appx. D.

- 84. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order on Remand to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).
- 85. IT IS FURTHER ORDERED, that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order on Remand, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.
- 86. IT IS FURTHER ORDERED that, pursuant to sections 1-4 and 10 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, and 160, this Memorandum Opinion and Order in WC Docket No. 18-141 IS ADOPTED.
- 87. IT IS FURTHER ORDERED that, pursuant to sections 1-4 and 10 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154 and 160, the petition for forbearance filed by USTelecom IS GRANTED solely to the extent discussed herein.
- 88. IT IS FURTHER ORDERED that, pursuant to section 1.103(a) of the Commission's rules, 47 CFR § 1.103(a), this Memorandum Opinion and Order in WC Docket No. 18-141 SHALL BE effective upon release. Pursuant to sections 1.4 and 1.13 of the Commission's rules, 47 CFR §§ 1.4, 1.13, the time for appeal SHALL RUN from the release date of this Memorandum Opinion and Order.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary

APPENDIX A

FINAL RULES

The Federal Communications Commission amends 47 CFR parts 61 and 69, as follows:

PART 61 - TARIFFS

1. Section 61.201 is amended by revising paragraph (a) to read as follows:

§ 61.201 Detariffing of price cap local exchange carriers.

- (a)(3) Any transport services as defined in § 69.801(j) of this chapter;
- 2. Section 61.203 is amended to read as follows:

§ 61.203 Detariffing of competitive local exchange carriers.

- (a) Competitive local exchange carriers shall remove all business data services from their interstate tariffs.
- (b) The detariffing must be completed by August 1, 2020.

PART 69 – ACCESS CHARGES

1. Section 69.807(a) is revised to read as follows:

§ 69.807 Regulatory relief.

- (a) Price cap local exchange carrier TDM transport, end user channel terminations in markets deemed competitive, and end user channel terminations in grandfathered markets for a price cap local exchange carrier that was granted Phase II pricing flexibility prior to June 2017, are granted the following regulatory relief:
 - (1) Elimination of the rate structure requirements contained in subpart B of this part;
 - (2) Elimination of price cap regulation; and
 - (3) Elimination of tariffing requirements as specified in § 61.201 of this chapter.

APPENDIX B

Final Regulatory Flexibility Analysis

1. As required by the Regulatory by the Regulatory Flexibility Act of 1980, as amended (RFA)¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the Second Further Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking (Second Further Notice) for the Time Division Multiplexing (TDM) transport business data services (BDS).² The Commission sought written public comment on the proposals in the Second Further Notice, including comment on the IRFA. The Commission received no comments on the IRFA. Because the Commission amends its rules in this Report and Order, the Commission has included this Final Regulatory Flexibility Analysis (FRFA). This present FRFA conforms to the RFA.³

A. Need for, and Objectives of, the Proposed Rules

2. In the *Second Further Notice*, the Commission proposed changes to, and sought comment on, the appropriate regulatory treatment of TDM transport BDS offerings offered by price cap local exchange carriers (LECs). The Commission proposed to remove ex ante pricing regulation from TDM transport business data services offered by price cap LECs. In this Order, we promote competition in the market for BDS TDM transport services by adopting a regulatory framework for those services that better reflects the dynamic competitive nature of price cap LECs' TDM transport markets.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

- 3. We analyze the market for TDM transport in areas served by price cap incumbent local exchange carriers and conclude that the record in this proceeding demonstrates widespread, significant and growing competition in this segment of the BDS market. We therefore grant nationwide relief from ex ante pricing regulation of these carriers' TDM transport services, forbear from applying Section 203 tariffing requirements to these services, and adopt permissive detariffing for price cap LECs' TDM transport services for a transition period, followed by mandatory detariffing of these services.
- 4. The Commission did not receive comments specifically addressing the rules and policies proposed in the IRFA.
 - C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration
 - 5. The Chief Counsel did not file any comments in response to this proceeding.
 - D. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply
- 6. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules and by the rule revisions on which the FNPRMs seek comment, if adopted.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996).

² Regulation of Business Data Services for Rate-of-Return Local Exchange Carriers, WC Docket No. 17-144, Notice of Proposed Rulemaking, FCC 18-46 (rel. April 18, 2018) (Notice).

³ See 5 U.S.C. § 604.

⁴ See 5 U.S.C. § 603(b)(3).

jurisdiction."⁵ In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act.⁶ A "small-business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁷

1. Total Small Entities

- 7. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.⁸ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA's Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.⁹ These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.¹⁰
- 8. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of August 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS). 12
- 9. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." U.S. Census Bureau data from the 2012 Census of Governments¹⁴ indicates that there were 90,056 local governmental jurisdictions consisting of general

(continued....)

⁵ See 5 U.S.C. § 601(6).

⁶ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

⁷ See 15 U.S.C. § 632.

⁸ See 5 U.S.C. § 601(3)-(6).

⁹ See SBA, Office of Advocacy, "Frequently Asked Questions, Question 1 – What is a small business?" https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016 WEB.pdf (June 2016).

¹⁰ See SBA, Office of Advocacy, "Frequently Asked Questions, Question 2- How many small businesses are there in the U.S.?" https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016 WEB.pdf (June 2016).

¹¹ 5 U.S.C. § 601(4).

¹² Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than \$100,000. Of this number 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of \$50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of \$100,000 or less on some other version of the IRS Form 990 within 24 months of the August 2016 data release date. *See* http://nccs.urban.org/sites/all/nccs-archive/html//tablewiz/tw.php where the report showing this data can be generated by selecting the following data fields: Report: "The Number and Finances of All Registered 501(c) Nonprofits"; Show: "Registered Nonprofits"; By: "Total Revenue Level (years 1995, Aug to 2016, Aug)"; and For: "2016, Aug" then selecting "Show Results".

^{13 5} U.S.C. § 601(5).

¹⁴ See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with "2" and "7". See also Program Description Census of Government

purpose governments and special purpose governments in the United States.¹⁵ Of this number there were 37, 132 general purpose governments (county¹⁶, municipal and town or township¹⁷) with populations of less than 50,000 and 12,184 special purpose governments (independent school districts¹⁸ and special districts¹⁹) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category shows that the majority of these governments have populations of less than 50,000.²⁰ Based on these data we estimate that at least 49,316 local government jurisdictions fall in the category of "small governmental jurisdictions."²¹

2. Broadband Internet Access Service Providers

10. Internet Service Providers (Broadband). Broadband Internet service providers include wired (e.g., cable, DSL) and VoIP service providers using their own operated wired telecommunications infrastructure fall in the category of Wired Telecommunication Carriers.²² Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.²³ The SBA size standard for this category

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https://factfinder.census.gov/faces	/affhelp/jsf/pages/metadata.xhtml?la	ing=en&type=progr	am&id=program.en.	CO
$G^{\#}$.			-	

¹⁵ U.S. Census Bureau, Statistical Abstract of the United States: 2012 at 267, Table 428 (2011), http://www2.census.gov/library/publications/2011/compendia/statab/131ed/2012-statab.pdf (citing data from 2007).

¹⁶ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01. There were 2,114 county governments with populations less than 50,000.

¹⁷ See U.S. Census Bureau, 2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States – States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01. There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

¹⁸ See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01. There were 12,184 independent school districts with enrollment populations less than 50,000.

¹⁹ See U.S. Census Bureau, 2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01. The U.S. Census Bureau data did not provide a population breakout for special district governments.

²⁰ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States - https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States-States - https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01. While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments the majority of the 38, 266 special district governments have populations of less than 50,000.

²¹ *Id*.

²² See, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition show the NAICs code as 517311. See, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017

 $^{^{23}}$ *Id*.

classifies a business as small if it has 1,500 or fewer employees.²⁴ U.S. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.²⁵ Consequently, under this size standard the majority of firms in this industry can be considered small.

3. Wireline Providers

- "establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry."²⁶ The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.²⁷ Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.²⁸ Thus, under this size standard, the majority of firms in this industry can be considered small.
- 12. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent LEC services. The closest applicable size standard under SBA rules is for the category Wired Telecommunications Carriers as defined above. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁹ According to Commission data, 3,117 firms operated in that year. Of this total, 3,083 operated with fewer than 1,000 employees.³⁰ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by the rules and policies adopted. A total of 1,307 firms reported that they were incumbent local exchange service providers.³¹ Of this total, an estimated 1,006 have 1,500 or fewer employees.³²
- 13. Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers. Neither the

²⁴ *Id*.

²⁵ http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml? pid=ECN 2012 US 51SSSZ2&prodType=table.

²⁶ U.S. Census Bureau, *NAICS Search*, http://www.census.gov/cgi-bin/sssd/naics/naicsrch (last visited June 21, 2017)

²⁷ 13 CFR § 121.201 (NAICS Code 517110).

²⁸ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016) http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

²⁹ 13 CFR § 121.201 (NAICS Code 517110).

³⁰ See U.S. Census Bureau, American Fact Finder (Jan. 08, 2016) http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

³¹ See Fed. Comme'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

³² See Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate NAICS Code category is Wired Telecommunications Carriers, as defined above. Under that size standard, such a business is small if it has 1,500 or fewer employees.³³ U.S. Census data for 2012 indicate that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees.³⁴ Based on this data, the Commission concludes that the majority of Competitive LECS, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers, are small entities. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services.³⁵ Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees.³⁶ In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees.³⁷ Also, 72 carriers have reported that they are Other Local Service Providers.³⁸ Of this total, 70 have 1,500 or fewer employees.³⁹ Consequently, based on internally researched FCC data, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities.

- 14. We have included small incumbent LECs in this present RFA analysis. As mentioned above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope. We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.
- 15. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a definition for Interexchange Carriers. The closest NAICS Code category is Wired Telecommunications Carriers as defined above. The applicable size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.⁴² U.S. Census data for 2012 indicates that 3,117 firms operated during

³³ 13 CFR § 121.201 (NAICS Code 517110).

³⁴ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016) http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodT_ype=table.

³⁵ See Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

³⁶ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

³⁷ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs-public/attachmatch/DOC-301823A1.pdf.

³⁸ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

³⁹ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁴⁰ 5 U.S.C. § 601(3).

⁴¹ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (filed May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 CFR § 121.102(b).

⁴² 13 CFR § 121.201 (NAICS Code 517110).

that year. Of that number, 3,083 operated with fewer than 1,000 employees.⁴³ According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.⁴⁴ Of this total, an estimated 317 have 1,500 or fewer employees.⁴⁵ Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our proposed rules.

- of Telecommunications Resellers. The SBA has developed a small business size standard for the category of Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities.
- 17. *Toll Resellers*. The Commission has not developed a definition for Toll Resellers. The closest NAICS Code Category is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000

⁴³ See U.S. Census Bureau, American Fact Finder (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

⁴⁴ See Fed. Comme'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁴⁵ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs-public/attachmatch/DOC-301823A1.pdf.

⁴⁶ U.S. Census Bureau, 2012 NAICS Definition, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012 (last visited Mar. 26, 2018).

⁴⁷ 13 CFR § 121.201 (NAICS code 517911).

⁴⁸ See U.S. Census Bureau, American Fact Finder (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (last visited Mar. 26, 2018).

⁴⁹ U.S. Census Bureau, 2012 NAICS Definition, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012 (last visited June 20, 2017) (NAICS 517911 Telecommunications Resellers).

⁵⁰ 13 CFR § 121.201 (NAICS code 517911).

⁵¹ See U.S. Census Bureau, American Fact Finder (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

employees.⁵² Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.⁵³ Of this total, an estimated 857 have 1,500 or fewer employees.⁵⁴ Consequently, the Commission estimates that the majority of toll resellers are small entities.

- 18. Other Toll Carriers. Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable NAICS Code category is for Wired Telecommunications Carriers as defined above. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to internally developed Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage. Of these, an estimated 279 have 1,500 or fewer employees. Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by rules adopted pursuant to the Second Further Notice.
- 19. Operator Service Providers (OSPs). Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.⁵⁹ According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 31 have 1,500 or fewer employees and two have more than 1,500 employees.⁶⁰ Consequently, the Commission estimates that the majority of OSPs are small entities.

4. Wireless Providers – Fixed and Mobile

20. Wireless Telecommunications Carriers (except Satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide

⁵² U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

⁵³ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁵⁴ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁵⁵ 13 CFR § 121.201 (NAICS code 517110).

⁵⁶ See U.S. Census Bureau, American Fact Finder (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

⁵⁷ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁵⁸ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁵⁹ 13 CFR § 121.201, NAICS code 517311.

⁶⁰ Trends in Telephone Service, tbl. 5.3.

services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees. For this industry, U.S. Census data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more. Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

- 21. The Commission's own data—available in its Universal Licensing System—indicate that, as of October 25, 2016, there are 280 Cellular licensees that will be affected by our actions today.⁶⁵ The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service, and Specialized Mobile Radio Telephony services.⁶⁶ Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees.⁶⁷ Thus, using available data, we estimate that the majority of wireless firms can be considered small.
- 22. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these definitions. ⁶⁹

⁶¹ See U.S. Census Bureau, American Fact Finder—About the Data, https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.517210 (NAICS Code 517210).

^{62 13} CFR § 121.201 (NAICS code 517210).

⁶³ U.S. Census Bureau, *American Fact Finder* (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prod_Type=table (NAICS 51720, "Subject Series - Estab & Firm Size: Employment Size of Establishments for the U.S.: 2012").

⁶⁴ U.S. Census Bureau, *American Fact Finder* (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (NAICS 51720, "Subject Series - Estab & Firm Size: Employment Size of Establishments for the U.S.: 2012"). Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

⁶⁵ See Fed. Commc'ns Comm'n, *Universal Licensing System*, http://wireless.fcc.gov/uls (last visited June 20, 2017). For the purposes of this FRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

⁶⁶ See Fed. Comme'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁶⁷ See Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁶⁸ Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

⁶⁹ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (filed Dec. 2, 1998) (*Alvarez Letter 1998*).

23. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As explained, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite). Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees. According to Commission data, 413 carriers reported that they were engaged in wireless telephony. Therefore, a little less than one third of these entities can be considered small.

5. Cable Service Providers

- 24. Because section 706 requires us to monitor the deployment of broadband using any technology, we anticipate that some broadband service providers may not provide telephone service. Accordingly, we describe below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.
- 25. Cable and Other Subscription Programming. This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcast programming is typically narrowcast in nature (e.g. limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers. The SBA has established a size standard for this industry stating that a business in this industry is small if it has 1,500 or fewer employees. The 2012 Economic Census indicates that 367 firms were operational for that entire year. Of this total, 357 operated with less than 1,000 employees. Accordingly we conclude that a substantial majority of firms in this industry are small under the applicable SBA size standard.
- 26. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standards for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.⁷⁷ Industry data indicate that there are currently 4,600 active cable systems in the United States.⁷⁸ Of this total, all but eleven cable operators nationwide are small under the 400,000-subscriber size standard.⁷⁹ In addition,

⁷⁰ 13 CFR § 121.201 (NAICS code 517210).

⁷¹ 13 CFR § 121.201 (NAICS code 517210).

⁷² Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁷³ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁷⁴ See U.S. Census Bureau, 2012 NAIC Definition, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515210&search=2012+NAICS+Search&search=2012 (last visited June 20, 2017) (2012 NAICS code, "515210 Cable and Other Subscription Programming").

^{75 13} CFR § 121.201 (NAICSs Code 515210).

⁷⁶ See U.S. Census Bureau, American Fact Finder (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (NAICS code 51510, "Estab & Firm Size: Employment Size of Establishments for the U.S.").

⁷⁷ 47 CFR § 76.901(e).

⁷⁸This figure was derived from an August 15, 2015 report from the FCC Media Bureau, based on data contained in the Commission's Cable Operations and Licensing System (COALS). *See* http://www.fcc.gov/coals.

⁷⁹ Data obtained from SNL Kagan database on April 19, 2017.

under the Commission's rate regulation rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Of this total, 3,900 cable systems have fewer than 15,000 subscribers, and 700 systems have 15,000 or more subscribers, based on the same records. Thus, under this standard as well, we estimate that most cable systems are small entities.

- 27. Cable System Operators (Telecom Act Standard). The Communications Act also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."82 There are approximately 52,403,705 cable video subscribers in the United States today. Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate. Based on available data, we find that all but nine incumbent cable operators are small entities under this size standard. The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million. Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.
- 28. All Other Telecommunications. "All Other Telecommunications" is defined as follows: This U.S. industry is comprised of establishments that are primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry. The SBA has developed a small business size standard for "All Other Telecommunications," which consists of all such firms with gross annual receipts of \$32.5 million or less. For this category, census data for 2012 show that there were 1,442 firms that operated for the entire year. Of these firms, a total of 1,400 had gross annual

^{80 47} CFR § 76.901(c).

⁸¹ August 5, 2015 report from the FCC Media Bureau based on its research in COALS. *See* http://www.fcc.gov/coals.

^{82 47} CFR § 76.901(f) & nn.1-3.

⁸³ See SNL Kagan at http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx (subscription required).

^{84 47} CFR § 76.901(f) & nn.1-3.

⁸⁵ See SNL Kagan at http://www.snl.com/interactivex/TopCable MSOs.aspx (subscription required).

⁸⁶ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission's rules. *See* 47 CFR § 76.901(f).

⁸⁷ U.S. Census Bureau, *NAICS Search*, http://www.census.gov/cgi-bin/sssd/naics/naicsrch (last visited June 21, 2017) (enter 2012 NAICS code 517919).

^{88 13} CFR § 121.201 (NAICS Code 517919).

receipts of less than \$25 million.⁸⁹ Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

- 29. The rule changes in the Order include reducing the unnecessary regulatory burdens and inflexibility of ex ante pricing regulation and tariffing requirements for price cap LECs' TDM transport services since the Commission has found there is sufficient competition to justify reduced regulation. These rule changes provide additional incentives for competitive entry, network investment and the migration to IP-based network technologies and services.
- 30. The transition period for detariffing price cap LECs' TDM transport services will begin on the effective date of this Order (thirty (30) days after Federal Register publication). Given our desire to align the transition periods we adopt here with those the Commission already adopted in the *BDS Order*, the transition periods for detariffing TDM transport services will end on the same date that the transition period mandated by the *BDS Order* for price cap LECs' other BDS services is scheduled to end—August 1, 2020.
- 31. Specifically, the Order eliminates ex ante pricing regulation and tariffing requirements for price cap LECs' TDM transport BDS. This will eliminate reporting, recordkeeping, and other compliance requirements for any price cap LEC.

F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

- 32. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.
- 33. The rule changes in this Order reduce the economic impact of the Commission's rules on price cap LECs by freeing price cap LECs from ex ante pricing regulation for their TDM transport offerings, including the requirement to tariff their TDM transport services. These rule changes will significantly minimize the economic impact of our rules on price cap LECs.

A. Report to Congress

34. The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act. ⁹¹ In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Order and FRFA (or summaries thereof) will also be published in the Federal Register.

⁸⁹ U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ4&prodType=table (2012 NAICS Code 517919, "Estab & Firm Size: Receipts Size of Firms for the U.S.").

⁹⁰ 5 U.S.C. § 603(c)(1)-(c)(4).

⁹¹ See 5 U.S.C. § 801(a)(1)(A).

STATEMENT OF CHAIRMAN AJIT PAI

Re: Business Data Services in an Internet Protocol Environment et al., WC Docket No. 16-143, GN Docket No. 13-5, WC Docket No. 05-25, RM-10593; Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141.

If you've heard the expression "low-hanging fruit," you know that it refers to something that is easy to achieve or obtain. As it turns out, for a variety of reasons, apple growers and scientists advise against literally picking the low-hanging fruit from a tree. Nevertheless, the phrase still has relevance in other contexts.

Take, for example, the transport services we address in this item. In the 2017 BDS Order, the FCC called transport services the "low-hanging fruit" for competitors in the business data services marketplace.³ This is because transport service providers typically carry higher volumes of voice and data traffic from one point of traffic concentration to another within or across telecommunications networks. As a result, these services offer a bigger revenue opportunity for new entrants that can more easily justify the investment needed to deploy transport networks themselves. These market realities and the growth in demand for transport in our increasingly digital world have fueled a lot of competition throughout the country among competitive carriers, fiber providers, cable companies, and incumbent carriers—some major markets have as many as 28 competitive transport providers.

As a result, today we prune unnecessary and burdensome regulations governing price cap incumbent carriers' transport services. Specifically, we affirm the FCC's previous findings that widespread and increasing competition in the supply of business data services transport justifies relieving price cap carriers of ex ante pricing regulation and tariffing of their lower-speed, legacy transport services. In so doing, we respond to a decision by the Eighth Circuit Court of Appeals last year. In that decision, the court repeatedly affirmed the Commission's deregulatory policy judgments in the 2017 *BDS Order* as reasonable, remanding solely on a narrow procedural issue that we address today.⁴

Given the competitive trends in transport, we also relieve price cap carriers of unnecessary unbundling obligations. Specifically, we act on a petition filed by USTelecom and grant partial forbearance relief from 1996-era requirements that incumbent carriers provide legacy transport links—known as DS1 and DS3 transport—to their competitors on an unbundled basis at regulated rates. Remember, these DS1s are transport services so slow that they offer only 6% of the speed of the FCC standard for high-speed broadband—25/3 Mbps. We also condition our forbearance on a reasonable transition period to allow competitive carriers an additional opportunity to deploy their own transport networks or to purchase transport from incumbent carriers or alternative suppliers. This forbearance will not only remove costly, market-distorting regulations but also encourage facilities-based competition, the

¹ See, e.g., Low-hanging fruit, CAMBRIDGE DICTIONARY, https://dictionary.cambridge.org/us/dictionary/english/low-hanging-fruit.

² See, e.g., Notable & Quotable: 'Low-Hanging Fruit,' THE WALL STREET JOURNAL (Feb. 9, 2016) (quoting Priceonomics.com, "Should You Literally Pick the Low-Hanging Fruit?" (Feb. 5, 2016)), https://www.wsj.com/articles/notable-quotable-low-hanging-fruit-1455063046; Jeff Harrop and Mike Doherty, *The Network Effect: Beyond Supply Chains*, "Low Hanging Fruit" (Mar. 31, 2013), https://supplychainbeyond.com/low-hanging-fruit/.

³ Business Data Services in an Internet Protocol Environment et al., Report and Order, 32 FCC Rcd 3459, para. 82 (2017).

⁴ Citizens Telecomms. Co. of Minn., LLC v. FCC, 901 F.3d 991 (8th Cir. 2018).

transition away from legacy networks, and new and continued investment in next-generation networks and services for the benefit of American consumers and businesses.

For their diligent work on this item, I'd like to thank Pam Arluk, Irina Asoskov, Michele Berlove, Megan Capasso, Greg Capobianco, Justin Faulb, Brendan Hanley, Lisa Hone, Christina Janne, Ed Krachmer, Kris Monteith, Terri Natoli, Belinda Nixon, Claudia Pabo, Eli Wachtel, and David Zesiger from the Wireline Competition Bureau; Octavian Carare, Ying Ke, Giulia McHenry, Pam Megna, Eric Ralph, Emily Talaga, Shane Taylor, and Tracy Waldon from the Office of Economics and Analytics; and Matthew Dunne, Doug Klein, Richard Mallen, Linda Oliver, William Richardson, and Richard Welch from the Office of General Counsel.

STATEMENT OF COMMISSIONER MICHAEL O'RIELLY

Re: Business Data Services in an Internet Protocol Environment et al., WC Docket No. 16-143, GN Docket No. 13-5, WC Docket No. 05-25, RM-10593; Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141.

This item takes important, yet restrained, steps in modernizing our rules to reflect changing market conditions for price cap incumbent local exchange carriers' (LEC) legacy transport offerings, and it has my full support.

First, this item resolves the Eighth Circuit's partial remand of the 2017 Business Data Services order. I supported our decision in that proceeding to recognize significant competition in special access markets and eliminate asymmetric pricing regulation affecting only incumbent LECs. If anything, the options for BDS transport service are even more competitive today, as reflected by the refreshed record, and the case for deregulation appears to be even more compelling.

Second, the item grants partial forbearance relief from price cap LECs' obligations to provide their competitors with unbundled access to their DS1 and DS3 transport facilities at regulated rates. While I am pleased to support this grant of forbearance, as the draft itself admits, this is a "conservative" approach to the UNE transport component of USTelecom's petition.

Thank you to Wireline Competition Bureau for their hard work on this item. I look forward to deciding the final pending issues in the USTelecom forbearance proceeding in the weeks ahead, and I vote to approve this item.

CONCURRING STATEMENT OF COMMISSIONER GEOFFREY STARKS

Re: Business Data Services in an Internet Protocol Environment et al., WC Docket No. 16-143, GN Docket No. 13-5, WC Docket No. 05-25, RM-10593; Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141.

Broadband connections are already essential for businesses to fully participate in our economy and will become even more important as the Internet of Things, telehealth, online education, and precision agriculture, to name just a few high-bandwidth uses that will be part of the digital transformation under way, become more widespread.

This item is about broadband for business – what providers can charge when they are the only option and when and under what terms competitive broadband providers can access parts of existing networks they use to provide business broadband services. This item continues the majority's steady march toward deregulation and, unfortunately, in the process, continues uprooting the Commission's longstanding and carefully balanced policies designed to foster deployment of business broadband services while at the same time protecting consumers of business broadband services where appropriate from pricing unconstrained by competition.

I was not a Commissioner in the Spring of 2017 when the Commission adopted the deregulatory Business Data Services order. But I know and have studied how that order turned the Commission's analysis of and precedent related to this proceeding on its head, adopting an extremely deregulatory approach to Business Data Services, including finding that BDS transport services faced competition nationwide and granting nationwide relief from pricing protections. The 8th Circuit Court of Appeals remanded part of that order back to the Commission for taking actions without proper notice. Today's order cures the notice problem, but the problems with the substance of the 2017 Order remain – it assumes, for the transport services under consideration, that the presence of potential competition in an area means that the area is completely competitive, and it removes regulations designed to ensure fair and reasonable prices, and it continues to rely on data from 2013 collected within the BDS proceeding - data that was stale and outdated at the time of the 2017 order and even more so now.

I disagree with these assumptions and would have worked toward a different outcome in the BDS proceeding. However, I recognize that there is a competitive market for these services in many parts of the country and I believe that evolution away from TDM-based transport over copper, toward higher speed fiber connections is where the network is headed - so I concur with this portion of the item.

I'm also voting to concur with the order partially granting USTelecom's forbearance requests related to TDM DS1 and DS3 transport. The majority finds that TDM BDS DS1 and DS3 transport links are functionally equivalent to the same links ordered as unbundled network elements – or "UNE's. So, it uses the same analysis it used in the 2017 BDS order and in today's BDS remand order, analysis characterized by counting "potential competition" in a specific place as a basis for assuming that there is competition in the area. I disagree with this analysis and method of measuring the presence of competition. But, I know that the copper transport lines of the legacy telephone network are no longer the only service option. So, I believe that it makes sense to look at obligations that were put in place for a network that has largely been replaced to consider whether they are still serving the purpose for which they were adopted, as forbearance petitions like the one USTelecom filed require us to do.

In considering this or any request to remove regulations through forbearance, I will look, as part of the statutorily required forbearance analysis, to see if the Commission would still be meeting its statutory obligations and key missions in the absence of the regulations in questions. In this case, this analysis is necessary to ensure that the Commission doesn't take actions that undercut competition. In considering the TDM DS1 and DS3 transport links at issue in this order, I believe that the network is rapidly evolving away from TDM-based transport over, toward higher speed fiber connections which will

bring high-speed, future-proof connections into communities will to support 5G networks. And, I believe that a three-year transition period will help most current users of DS1 and DS3 UNEs find other ways to deliver the products and services to their customers. I thank the Chairman for resisting calls to reduce the transition period – which, to me, is a critical part of this order.

I also thank the Chairman for working with me to find a way to make this order work for Puerto Rico. As we are painfully aware, Puerto Rico was devasted during the 2017 Hurricane season and had its telecommunications network nearly completely destroyed. Because of the devastation, Puerto Rico is different and warrants different treatment, as the order now recognizes. As carriers continue the process of rebuilding in Puerto Rico, I think a significantly longer transition period before the granted forbearance takes effect is right and I'm glad to see that the order now includes one. This longer transition period – five years instead of three – will give competitive carriers serving in Puerto Rico more time to continue their rebuilding and recovery efforts before the changes that will come with the forbearance have to factor into their business plans. And, it will save money for customers in Puerto Rico as the prices for services that competitors in Puerto Rico use to serve their customers will not change due to the granted forbearance during the five-year transition period.

I know that even this second order addressing USTelecom's forbearance petition is not the last we will hear about it, as USTelecom's requests for forbearance from obligations applicable to certain loops remains outstanding. My vote to concur with this order addressing USTelecom's transport requests should not be read to prejudge how I will vote on the remaining forbearance requests. The Chairman has circulated a draft order to address those requests. I'm studying that order and the changes it would make and will act in a manner that considers the state of today's communications marketplace but that does not undercut competition in the name of deregulation.

I recognize that a forbearance item like this one is complex and that an intersecting Business Data Services order only makes it more so. I thank the staff of the Wireline Competition Bureau for their work in preparing it.